



Power
quality.
Solved.

Solutions Catalog

We set the benchmark for power quality.

We pride ourselves on engineering products that don't just work, but deliver integrated, sophisticated solutions that are specifically designed for your application needs.

Our goal at MTE is to eliminate the worry and headaches caused by power distortion. Beyond helping you bring power quality into compliance, our filters increase efficiency, productivity, and equipment life.

But most importantly, our filters are proven to increase your bottom line.



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Reactors

RL Reactors

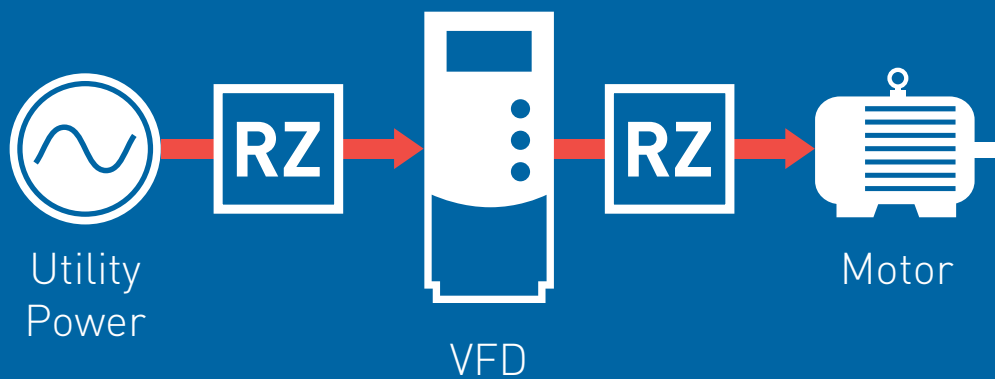
Best-in-class power quality units for absorbing power line disturbances

RLW Reactors

State-of-the-art solution for absorbing everyday power line disturbances

DC Link Chokes

The cost-effective, versatile solution to solving power quality problems



RL Reactors

Product Selector



- **Best-in-class line/load reactors**
- **Most robust, highest continuous service factor**
- **Low watts loss**
- **Performance and durability that is unmatched by the competition**

Peace of mind included.

Our RL Line/Load Reactors are best-in-class power quality units with a long history of proven performance. Rugged and robust, they are unequaled in absorbing power line disturbances that can damage or shut down variable frequency drives (VFDs) and other sensitive equipment. They work on both the line side and load side to give you an easy solution that reduces nuisance tripping, reduces harmonic distortion and minimizes long lead effects.

Improved power quality, enhanced productivity and complete peace of mind are easy with RL Line/ Load Reactors.

Get best-in-class performance with our RL Line/Load Reactors.

Our RL Line/Load Reactors are a robust, best-in-class filtering solution for virtually any 4 or 6-pulse rectifier or power conversion unit. There is no need to derate these reactors. They are harmonic compensated and protected to assure optimum performance in the presence of harmonics, and can help you meet IEEE-519 requirements. There are units available for a full line of currents (1A to 1,500A) and a full line of impedance options (1.5%, 3% and 5%).

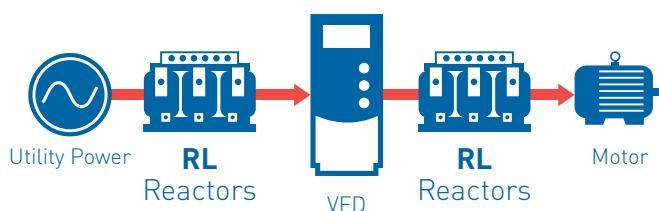
Robust design and construction for unequalled filtering of power line disturbances.

Highest continuous service factor virtually eliminates breakdowns in the field.

Reduces audible noise.

Multiple cabinet designs help meet NEMA 1/2 and 3R.

RL Reactors

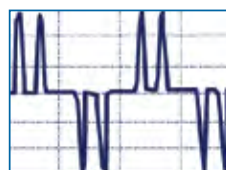


Performance Specifications

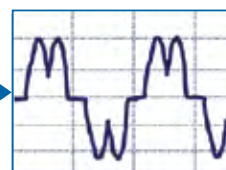
Impedance Levels	1.5%, 3% and 5%
Continuous Service Factor	Reactors rated 1 to 750 Amps - 150% of rating Reactors rated above 750 Amps - 125% of rating
Overload Rating	200% of rated for 30 minutes 300% of rated for 1 minute
Input Voltage Range	208V - 690V
Current Range	1A - 1,500A
Temperature Rise	135°C
Ambient Temperature	-40°C to 50°C
Altitude Maximum Without Derating	1,000 meters
Fundamental Frequency	50/60 Hz
Inductance Curve	100% at 100% Current 100% at 150% Current 50% at 350% Current

Final product specifications subject to change at anytime.

MTE Input Reactor

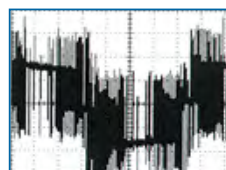


Waveform without reactor

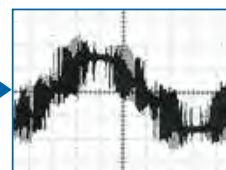


Waveform with reactor

MTE Output Reactor

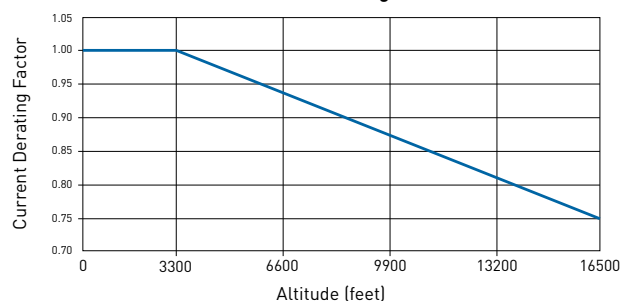


Waveform without reactor



Waveform with reactor

Altitude Derating Curve



ENCLOSURES

FIGURE 1

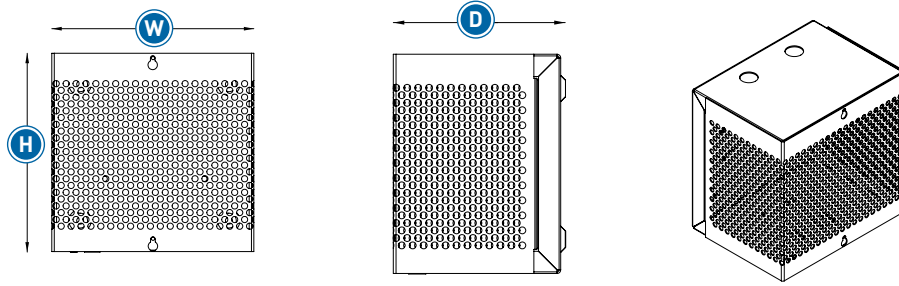
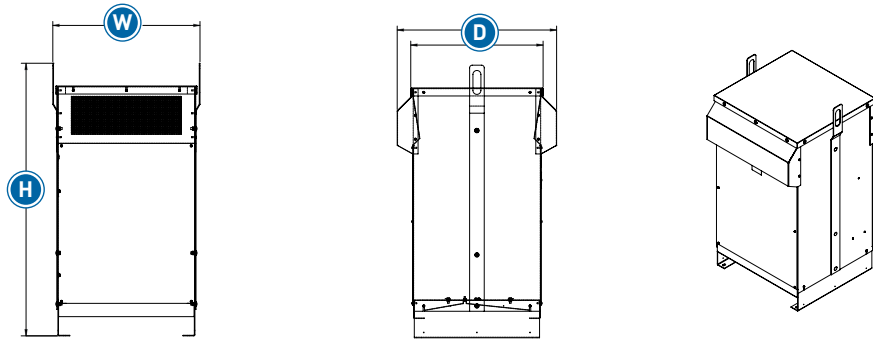
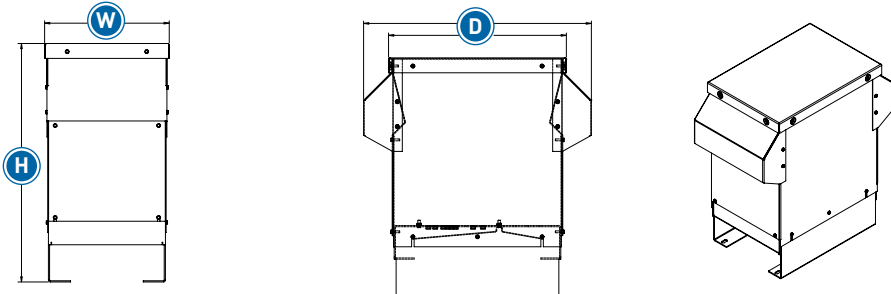


FIGURE 2



NOTE: HOODS
ONLY ON NEMA
3R ENCLOSURES

FIGURE 3



NOTE: HOODS
ONLY ON NEMA
3R ENCLOSURES

FIGURE 4

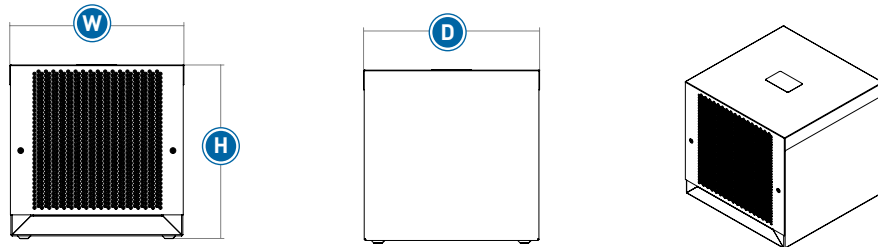
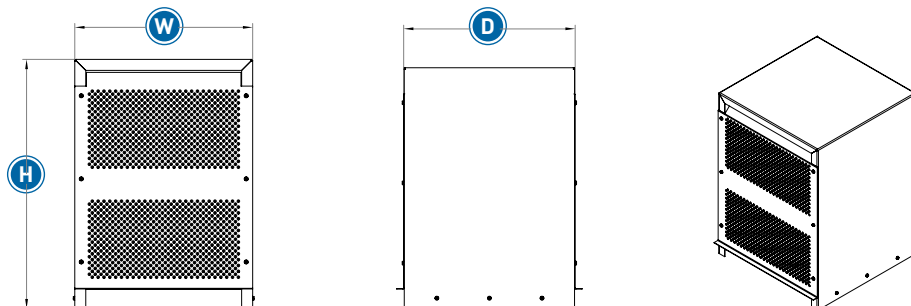


FIGURE 5



Note: Figure illustrations are for reference only. Actual hardware may differ. Please visit mtecorp.com for detailed information

RL REACTOR SELECTION TABLES

Input Voltage & Hz	% Impedance	0.25 HP 0.18 kw	0.33 HP 0.25 kw	0.5 HP 0.37 kw	0.75 HP 0.55 kw	1.0 HP 0.75 kw	1.5 HP 1.1 kw	2.0 HP 1.5 kw	3.0 HP 2.2 kw	5.0 HP 3.7 kw	7.5 HP 5.5 kw	10.0 HP 7.5 kw	15.0 HP 11.0 kw	20.0 HP 15.0 kw	25.0 HP 18.5 kw	30.0 HP 22.0 kw
Three Phase Input or Output Applications Selected by Motor																
208V 60 Hz	3%	RL-00204	RL-00204	RL-00401	RL-00401	RL-00801	RL-00801	RL-00801	RL-01801	RL-02501	RL-03501	RL-05501	RL-05501	RL-08001	RL-10001	RL-10001
208V 60 Hz	5%	RL-00201	RL-00403	RL-00402	RL-00803	RL-00802	RL-00802	RL-01202	RL-01802	RL-02502	RL-03502	RL-05502	RL-04501	RL-05501	RL-08001	RL-13002
240V 60 Hz	3%	RL-00204	RL-00204	RL-00402	RL-00401	RL-00802	RL-00801	RL-00801	RL-01201	RL-01801	RL-02501	RL-03501	RL-04501	RL-05501	RL-08001	RL-10001
240V 60 Hz	5%	RL-00201	RL-00201	RL-00403	RL-00402	RL-00803	RL-00802	RL-00802	RL-01202	RL-02502	RL-03502	RL-03502	RL-05502	RL-08002	RL-10001	RL-08001
400V 50 Hz	3%	RL-00103	RL-00103	RL-00202	RL-00201	RL-00403	RL-00402	RL-00402	RL-00803	RL-00802	RL-01202	RL-01802	RL-02502	RL-03502	RL-04502	RL-04502
400V 50 Hz	5%	RL-00102	RL-00102	RL-00203	RL-00202	RL-00202	RL-00404	RL-00403	RL-00804	RL-00803	RL-01203	RL-01803	RL-02503	RL-03503	RL-04503	RL-05503
480V 60 Hz	3%	RL-00103	RL-00103	RL-00104	RL-00201	RL-00201	RL-00402	RL-00402	RL-00803	RL-00802	RL-01202	RL-01802	RL-02502	RL-03502	RL-03502	RL-04502
480V 60 Hz	5%	RL-00102	RL-00102	RL-00103	RL-00202	RL-00202	RL-00404	RL-00403	RL-00804	RL-00803	RL-01203	RL-01803	RL-02503	RL-03503	RL-03503	RL-05503
600V 60 Hz	3%	RL-00102	RL-00103	RL-00103	RL-00202	RL-00202	RL-00201	RL-00403	RL-00402	RL-00803	RL-01202	RL-01202	RL-01802	RL-02502	RL-02502	RL-03502
600V 60 Hz	5%	RL-00101	RL-00102	RL-00102	RL-00203	RL-00203	RL-00202	RL-00404	RL-00404	RL-00804	RL-01203	RL-01203	RL-01803	RL-02503	RL-02503	RL-03503
690V 50 Hz	2%	-	-	-	-	-	-	-	RL-00403	RL-00803	RL-00803	RL-01202	RL-01202	RL-01802	RL-02502	RL-02502
690V 50 Hz	3%	-	-	-	-	-	-	-	RL-00404	RL-00804	RL-00804	RL-01203	RL-01203	RL-01803	RL-02503	RL-02503
Single Phase Input Applications																
120V 60 Hz	5%	RL-01801	RL-01801	RL-01201	RL-01801	RL-01801	RL-02501	RL-03501	RL-05501	RL-10001	RL-16001	RL-20001B14	-	-	-	-
208V 60 Hz	5%	RL-00204	RL-00803	RL-00802	RL-01202	RL-00801	RL-01201	RL-01201	RL-01801	RL-03501	RL-04501	RL-05501	RL-08001	RL-10001	RL-13001	RL-16001
240V 60 Hz	5%	RL-00402	RL-00402	RL-00803	RL-00802	RL-01202	RL-01201	RL-01201	RL-01801	RL-02501	RL-04501	RL-04501	RL-08001	RL-10001	RL-13001	RL-16002
240V 50 Hz	5%	RL-00403	RL-00402	RL-00803	RL-00802	RL-00802	RL-01802	RL-01802	RL-02502	RL-03502	RL-03501	RL-05502	RL-10002	RL-13002	RL-13002	RL-16002
400V 50 Hz	5%	RL-00103	RL-00203	RL-00201	RL-00404	RL-00403	RL-00803	RL-00803	RL-01203	RL-01803	RL-02503	RL-03503	RL-04502	RL-05502	RL-08002	RL-08002
480V 60 Hz	5%	RL-00203	RL-00202	RL-00202	RL-00404	RL-00403	RL-00803	RL-00803	RL-01203	RL-01803	RL-02503	RL-02502	RL-04502	RL-05503	RL-08003	RL-08002
600V 60 Hz	5%	RL-00102	RL-00103	RL-00202	RL-00202	RL-00404	RL-00403	RL-00804	RL-00803	RL-01203	RL-01803	RL-02503	RL-03503	RL-04503	RL-05503	RL-05503

Note: The recommended reactor selections above are based on fundamental current ratings. Contact appengrg@mtecorp.com with any questions regarding the proper reactor selection.

Impedance Rating:

3% impedance reactors are typically sufficient to absorb power line spikes and motor current surges. They will prevent nuisance tripping of drives or circuit breakers in most applications.

5% impedance reactors are best for reducing harmonic currents and frequencies. Use them when you must reduce VFD drive generated harmonics, and to reduce motor operating temperature, or to reduce motor noise.

*The effective impedance of the reactor changes with actual RMS current. A 5% impedance reactor becomes 3% if its current is reduced to 60%.

40.0 HP 30.0 kw	50.0 HP 37.5 kw	60.0 HP 45.0 kw	75.0 HP 55.0 kw	100.0 HP 75.0 kw	125.0 HP 93.0 kw	150.0 HP 112.0 kw	200.0 HP 150.0 kw	250.0 HP 187.0 kw	300.0 HP 225.0 kw	350.0 HP 262.0 kw	400.0 HP 300.0 kw	500.0 HP 375.0 kw	600.0 HP 450.0 kw	700.0 HP 550.0 kw	800.0 HP 600.0 kw
Three Phase Input or Output Applications Selected by Motor															
RL-13001	RL-16001	RL-20001B14	RL-25001B14	RL-32001B14	RL-40001B14	RL-50001B14	RL-60001	RL-75001	RL-85001B14	RL-100001B14	RL-120001B14	RL-140001	-	-	-
RL-16002	RL-20002B14	RL-25002B14	RL-32002B14	RL-40002B14	RL-50002	RL-75002	RL-75002	RL-90002B14	RL-100002B14	RL-120002B14	RL-150002	-	-	-	-
RL-13001	RL-13001	RL-16001	RL-20001B14	RL-25001B14	RL-32001B14	RL-40001B14	RL-50001B14	RL-60001	RL-75001	RL-85001B14	RL-100001B14	RL-120001B14	-	-	-
RL-13002	RL-16002	RL-16002	RL-20002B14	RL-25002B14	RL-40002B14	RL-40002B14	RL-60002	RL-75002	RL-75002	RL-85002B14	RL-100002B14	RL-140002	-	-	-
RL-08002	RL-08002	RL-10002	RL-13002	RL-16002	RL-20002B14	RL-20002B14	RL-32002B14	RL-40002B14	RL-40002B14	RL-50002	RL-60002	RL-75002	RL-85002B14	RL-90002B14	RL-120002B14
RL-08003	RL-10003	RL-10003	RL-13003	RL-16003	RL-20003B14	RL-20003B14	RL-32003B14	RL-40003B14	RL-40003B14	RL-50003	RL-60003	RL-75003	RL-85003B14	RL-90003B14	RL-120003B14
RL-05502	RL-08002	RL-10002	RL-10002	RL-13002	RL-16002	RL-20002B14	RL-25002B14	RL-32002B14	RL-40002B14	RL-50002	RL-50002	RL-60002	RL-75002	RL-85002B14	RL-100002B14
RL-05503	RL-08003	RL-10003	RL-10003	RL-13003	RL-16003	RL-20003B14	RL-25003B14	RL-32003B14	RL-40003B14	RL-50003	RL-50003	RL-60003	RL-75003	RL-85003B14	RL-100003B14
RL-04502	RL-05502	RL-08002	RL-08002	RL-10002	RL-13002	RL-16002	RL-20002B14	RL-25002B14	RL-32002B14	RL-32002B14	RL-40002B14	RL-50002	RL-60002	RL-75002	RL-75002
RL-04503	RL-05503	RL-08003	RL-08003	RL-10003	RL-13003	RL-16003	RL-20003B14	RL-25003B14	RL-32003B14	RL-32003B14	RL-40003B14	RL-50003	RL-60003	RL-75003	RL-75003
RL-03502	RL-04502	RL-05502	RL-05502	RL-08002	RL-10002	RL-13002	RL-16002	RL-20002B14	RL-25002B14	RL-25002B14	RL-32002B14	RL-40002B14	RL-40002B14	RL-50002	RL-60002
RL-03503	RL-04503	RL-05503	RL-05503	RL-08003	RL-10003	RL-13003	RL-16003	RL-20003B14	RL-25003B14	RL-25003B14	RL-32003B14	RL-40003B14	RL-50003	RL-50003	RL-60003
Single Phase Input Applications															
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RL-20001B14	RL-25001B14	RL-32001B14	RL-40001B14	RL-50001B14	-	-	-	-	-	-	-	-	-	-	-
RL-20002B14	RL-25002B14	RL-32002B14	RL-32001B14	RL-40001B14	-	-	-	-	-	-	-	-	-	-	-
RL-13002	RL-25002B14	RL-32002B14	RL-40002B14	RL-50002	-	-	-	-	-	-	-	-	-	-	-
RL-10002	RL-13003	RL-16003	RL-20003B14	RL-25003B14	-	-	-	-	-	-	-	-	-	-	-
RL-10002	RL-13003	RL-16003	RL-20003B14	RL-25003B14	RL-32003B14	RL-40003B14	RL-40003B14	-	-	-	-	-	-	-	-
RL-08003	RL-10003	RL-13003	RL-13003	RL-20003B14	RL-25003B14	RL-25003B14	RL-32003B14	-	-	-	-	-	-	-	-

Note: The recommended reactor selections above are based on fundamental current ratings. Contact appengrg@mtecorp.com with any questions regarding the proper reactor selection.

RL REACTOR SELECTION TABLES

Open					
Open Part Number	Amps Rating	Inductance mh	Watts Loss	Open Weight (lbs)	Size (In) (H x W x D)
RL-00101	1	100	13.5	2.2	3.5 x 3.8 x 1.2
RL-00102	1	50	12.8	2.1	3.5 x 3.8 x 1.2
RL-00103	1	36	11.9	2.1	3.5 x 3.8 x 1.2
RL-00104	1	18	9.6	3	4.0 x 4.2 x 2.6
RL-00201	2	12	7.5	4	4.1 x 4.4 x 2.8
RL-00202	2	20	11.3	4	4.1 x 4.4 x 2.8
RL-00203	2	32	16	4	4.1 x 4.4 x 2.8
RL-00204	2	6	10.7	3	4.1 x 4.4 x 2.5
RL-00401	4	3	14.5	4	4.1 x 4.4 x 2.8
RL-00402	4	6.5	20	4	4.1 x 4.4 x 2.8
RL-00403	4	9	20	5	4.1 x 4.4 x 3.4
RL-00404	4	12	21	6	4.1 x 4.4 x 3.4
RL-00801	8	1.5	19.5	7	4.8 x 6 x 3
RL-00802	8	3	29	8	4.8 x 6 x 3
RL-00803	8	5	25.3	11	4.8 x 6 x 3.4
RL-00804	8	7.5	28	13	4.8 x 6 x 3.4
RL-01201	12	1.25	26	9	5 x 6 x 3.3
RL-01202	12	2.5	31	10	5 x 6 x 3.3
RL-01203	12	4.2	41	18	5 x 6 x 3.9
RL-01801	18	0.8	36	9	5.3 x 6 x 3.2
RL-01802	18	1.5	43	12	5.3 x 6 x 3.5
RL-01803	18	2.5	43	16	6.1 x 8.1 x 4
RL-02501	25	0.5	48	11	5.8 x 7.2 x 3.5
RL-02502	25	1.2	52	14	5.8 x 7.2 x 3.5
RL-02503	25	1.8	61	20	5.8 x 7.2 x 4.3
RL-03501	35	0.4	49	14	5.8 x 7.2 x 4
RL-03502	35	0.8	54	16	5.8 x 7.2 x 4
RL-03503	35	1.2	54	30	7.4 x 9 x 4.7
RL-04501	45	0.3	54	23	7.4 x 9 x 4.7
RL-04502	45	0.7	62	28	7.4 x 9 x 4.7
RL-04503	45	1.2	65	39	7.3 x 9 x 5.3
RL-05501	55	0.25	64	24	7.3 x 9 x 5.3
RL-05502	55	0.5	67	27	7 x 9 x 5.3
RL-05503	55	0.85	71	41	7 x 9 x 6
RL-08001	80	0.2	82	25	7.2 x 9 x 6.3
RL-08002	80	0.4	86	33	7.2 x 9 x 6.5
RL-08003	80	0.7	96	61	8.5 x 10.8 x 6.8
RL-10001	100	0.15	94	29	7.3 x 9 x 6.5
RL-10002	100	0.3	84	37	7.3 x 9 x 6.8
RL-10003	100	0.45	108	74	8.25 x 10.8 x 6.16
RL-13001	130	0.1	108	29	7 x 9 x 4.66
RL-13002	130	0.2	180	43	7.2 x 9 x 6.8
RL-13003	130	0.3	128	64	8.5 x 11 x 6.16

Open					
Open Part Number	Amps Rating	Inductance mh	Watts Loss	Open Weight (lbs)	Size (In) (H x W x D)
RL-16001	160	0.075	116	41	7.2 x 9 x 6.8
RL-16002	160	0.15	149	51	8.3 x 10.8 x 6
RL-16003	160	0.23	138	72	8.5 x 11.5 x 9
RL-20001B14	200	0.055	124	38	7.5 x 9 x 7.3
RL-20002B14	200	0.11	168	54	7.5 x 9 x 8.3
RL-20003B14	200	0.185	146	100	8.3 x 10.8 x 10
RL-25001B14	250	0.045	154	47	7.5 x 9 x 9
RL-25002B14	250	0.09	231	80	8.5 x 10.8 x 9
RL-25003B14	250	0.15	219	125	11.2 x 14.4 x 10.3
RL-32001B14	320	0.04	224	80	9 x 10.8 x 8.3
RL-32002B14	320	0.075	264	102	9 x 10.8 x 10
RL-32003B14	320	0.125	351	160	11.25 x 14.4 x 10.5
RL-40001B14	400	0.03	231	84	10 x 10.8 x 10
RL-40002B14	400	0.06	333	118	11.25 x 15 x 11.5
RL-40003B14	400	0.105	293	149	11.25 x 14.4 x 12.5
RL-50001B14	500	0.025	266	93	9 x 10.8 x 10.5
RL-50002	500	0.05	340	118	11.5 x 14.4 x 11.5
RL-50003	500	0.085	422	210	11.5 x 14.4 x 13.3
RL-60001	600	0.02	307	120	11.5 x 14.4 x 10
RL-60002	600	0.04	414	175	11.25 x 14.4 x 12
RL-60003	600	0.065	406	270	11.25 x 14.4 x 15
RL-75001	750	0.015	427	140	11.5 x 14.4 x 11
RL-75002	750	0.029	630	190	11.5 x 14.4 x 12.5
RL-75003	750	0.048	552	265	14.5 x 14.4 x 14
RL-85001B14	850	0.015	798	195	15.5 x 17.8 x 14.5
RL-85002B14	850	0.027	930	215	15.5 x 17.8 x 15.5
RL-85003B14	850	0.042	1133	315	15.5 x 17.8 x 17.5
RL-90001B14	900	0.013	860	200	16.8 x 17.8 x 13
RL-90002B14	900	0.025	1020	215	15.5 x 17.8 x 15.5
RL-90003B14	900	0.04	1365	315	15.8 x 17.8 x 17.1
RL-100001B14	1000	0.011	940	144	14.5 x 17.8 x 12.7
RL-100002B14	1000	0.022	1090	215	15.5 x 17.8 x 15.5
RL-100003B14	1000	0.038	1500	315	15.8 x 17.8 x 17.5
RL-120001B14	1200	0.009	980	195	15.5 x 17.8 x 14.5
RL-120002B14	1200	0.019	1130	275	15.5 x 17.8 x 17.8
RL-120003B14	1200	0.03	1550	390	15.4 x 17.4 x 18.3
RL-140001	1400	0.008		500	17 x 22 x 22
RL-140002	1400	0.016	1523	525	17 x 19 x 19
RL-140003	1400	0.027	1680	850	17 x 22 x 22
RL-150001	1500	0.008	1432	635	17 x 22 x 22
RL-150002	1500	0.015	1671	675	17 x 16.9 x 16
RL-150003	1500	0.025	1815	900	17 x 22 x 22

Note: Weights and dimensions are for reference only. Please visit mtecorp.com for detailed information.

NEMA 1/2				
Part Number	Weight (lbs)	Cabinet	Size (In) (H x W x D)	Ref Figure
RL-00111	9	CAB-8	8 x 8 x 6	1
RL-00112	9	CAB-8	8 x 8 x 6	1
RL-00113	9	CAB-8	8 x 8 x 6	1
RL-00114	9	CAB-8	8 x 8 x 6	1
RL-00211	11	CAB-8	8 x 8 x 6	1
RL-00212	11	CAB-8	8 x 8 x 6	1
RL-00213	11	CAB-8	8 x 8 x 6	1
RL-00214	10	CAB-8	8 x 8 x 6	1
RL-00411	11	CAB-8	8 x 8 x 6	1
RL-00412	11	CAB-8	8 x 8 x 6	1
RL-00413	12	CAB-8	8 x 8 x 6	1
RL-00414	13	CAB-8	8 x 8 x 6	1
RL-00811	14	CAB-8	8 x 8 x 6	1
RL-00812	15	CAB-8	8 x 8 x 6	1
RL-00813	18	CAB-8	8 x 8 x 6	1
RL-00814	20	CAB-8	8 x 8 x 6	1
RL-01211	16	CAB-8	8 x 8 x 6	1
RL-01212	17	CAB-8	8 x 8 x 6	1
RL-01213	25	CAB-8	8 x 8 x 6	1
RL-01811	16	CAB-8	8 x 8 x 6	1
RL-01812	19	CAB-8	8 x 8 x 6	1
RL-01813	34	CAB-13V	13 x 13 x 13	4
RL-02511	29	CAB-13V	13 x 13 x 13	4
RL-02512	32	CAB-13V	13 x 13 x 13	4
RL-02513	38	CAB-13V	13 x 13 x 13	4
RL-03511	32	CAB-13V	13 x 13 x 13	4
RL-03512	34	CAB-13V	13 x 13 x 13	4
RL-03513	48	CAB-13V	13 x 13 x 13	4
RL-04511	41	CAB-13V	13 x 13 x 13	4
RL-04512	46	CAB-13V	13 x 13 x 13	4
RL-04513	57	CAB-13V	13 x 13 x 13	4
RL-05511	42	CAB-13V	13 x 13 x 13	4
RL-05512	45	CAB-13V	13 x 13 x 13	4
RL-05513	59	CAB-13V	13 x 13 x 13	4
RL-08011	43	CAB-13V	13 x 13 x 13	4
RL-08012	51	CAB-13V	13 x 13 x 13	4
RL-08013	79	CAB-13V	13 x 13 x 13	4
RL-10011	47	CAB-13V	13 x 13 x 13	4
RL-10012	55	CAB-13V	13 x 13 x 13	4
RL-10013	92	CAB-13V	13 x 13 x 13	4
RL-13011	47	CAB-13V	13 x 13 x 13	4
RL-13012	61	CAB-13V	13 x 13 x 13	4
RL-13013	82	CAB-13V	13 x 13 x 13	4
RL-16011	59	CAB-13V	13 x 13 x 13	4
RL-16012	69	CAB-13V	13 x 13 x 13	4
RL-16013	90	CAB-13V	13 x 13 x 13	4
RL-20011B14	56	CAB-13V	13 x 13 x 13	4
RL-20012B14	72	CAB-13V	13 x 13 x 13	4
RL-20013B14	118	CAB-13V	13 x 13 x 13	4
RL-25011B14	65	CAB-13V	13 x 13 x 13	4
RL-25012B14	104	CAB-17V	24 x 17 x 18.4	5
RL-25013B14	149	CAB-17V	24 x 17 x 18.4	5
RL-32011B14	104	CAB-17V	24 x 17 x 18.4	5
RL-32012B14	126	CAB-17V	24 x 17 x 18.4	5
RL-32013B14	184	CAB-17V	24 x 17 x 18.4	5
RL-40011B14	108	CAB-17V	24 x 17 x 18.4	5
RL-40012B14	142	CAB-17V	24 x 17 x 18.4	5
RL-40013B14	173	CAB-17V	24 x 17 x 18.4	5
RL-50011B14	117	CAB-17V	24 x 17 x 18.4	5
RL-50012	262	CAB-26C	47 x 27 x 25	3
RL-50013	354	CAB-26C	47 x 27 x 25	3
RL-60011	264	CAB-26C	47 x 27 x 25	3
RL-60012	319	CAB-26C	47 x 27 x 25	3
RL-60013	414	CAB-26C	47 x 27 x 25	3
RL-75011	284	CAB-26C	47 x 27 x 25	3
RL-75012	334	CAB-26C	47 x 27 x 25	3
RL-75013	409	CAB-26C	47 x 27 x 25	3
RL-85011B14	339	CAB-26C	47 x 27 x 25	3
RL-85012B14	359	CAB-26C	47 x 27 x 25	3
RL-85013B14	535	CAB-26D	72 x 26.5 x 25	3
RL-90011B14	420	CAB-26D	72 x 26.5 x 25	3
RL-90012B14	435	CAB-26D	72 x 26.5 x 25	3
RL-90013B14	535	CAB-26D	72 x 26.5 x 25	3
RL-100011B14	364	CAB-26D	72 x 26.5 x 25	3
RL-100012B14	435	CAB-26D	72 x 26.5 x 25	3
RL-100013B14	535	CAB-26D	72 x 26.5 x 25	3
RL-120011B14	415	CAB-26D	72 x 26.5 x 25	3
RL-120012B14	495	CAB-26D	72 x 26.5 x 25	3
RL-120013B14	610	CAB-26D	72 x 26.5 x 25	3
RL-140011	803	CAB-42C	60 x 42.6 x 31	3
RL-140012	828	CAB-42C	60 x 42.6 x 31	3
RL-140013	1153	CAB-42C	60 x 42.6 x 31	3
RL-150011	938	CAB-42C	60 x 42.6 x 31	3
RL-150012	978	CAB-42C	60 x 42.6 x 31	3
RL-150013	1203	CAB-42C	60 x 42.6 x 31	3

NEMA 3R				
Part Number	Weight (lbs)	Cabinet	Size (In) (H x W x D)	Ref Figure
RL-00131	70	CAB-12C3	24 x 12.5 x 20	2
RL-00132	70	CAB-12C3	24 x 12.5 x 20	2
RL-00133	70	CAB-12C3	24 x 12.5 x 20	2
RL-00134	70	CAB-12C3	24 x 12.5 x 20	2
RL-00231	72	CAB-12C3	24 x 12.5 x 20	2
RL-00232	72	CAB-12C3	24 x 12.5 x 20	2
RL-00233	72	CAB-12C3	24 x 12.5 x 20	2
RL-00234	71	CAB-12C3	24 x 12.5 x 20	2
RL-00431	72	CAB-12C3	24 x 12.5 x 20	2
RL-00432	72	CAB-12C3	24 x 12.5 x 20	2
RL-00433	73	CAB-12C3	24 x 12.5 x 20	2
RL-00434	74	CAB-12C3	24 x 12.5 x 20	2
RL-00831	75	CAB-12C3	24 x 12.5 x 20	2
RL-00832	76	CAB-12C3	24 x 12.5 x 20	2
RL-00833	79	CAB-12C3	24 x 12.5 x 20	2
RL-00834	81	CAB-12C3	24 x 12.5 x 20	2
RL-01231	77	CAB-12C3	24 x 12.5 x 20	2
RL-01232	78	CAB-12C3	24 x 12.5 x 20	2
RL-01233	86	CAB-12C3	24 x 12.5 x 20	2
RL-01831	77	CAB-12C3	24 x 12.5 x 20	2
RL-01832	80	CAB-12C3	24 x 12.5 x 20	2
RL-01833	100	CAB-17C3	31 x 17.5 x 23	2
RL-02531	95	CAB-17C3	31 x 17.5 x 23	2
RL-02532	98	CAB-17C3	31 x 17.5 x 23	2
RL-02533	104	CAB-17C3	31 x 17.5 x 23	2
RL-03531	98	CAB-17C3	31 x 17.5 x 23	2
RL-03532	100	CAB-17C3	31 x 17.5 x 23	2
RL-03533	114	CAB-17C3	31 x 17.5 x 23	2
RL-04531	107	CAB-17C3	31 x 17.5 x 23	2
RL-04532	112	CAB-17C3	31 x 17.5 x 23	2
RL-04533	123	CAB-17C3	31 x 17.5 x 23	2
RL-05531	108	CAB-17C3	31 x 17.5 x 23	2
RL-05532	111	CAB-17C3	31 x 17.5 x 23	2
RL-05533	125	CAB-17C3	31 x 17.5 x 23	2
RL-08031	109	CAB-17C3	31 x 17.5 x 23	2
RL-08032	117	CAB-17C3	31 x 17.5 x 23	2
RL-08033	145	CAB-17C3	31 x 17.5 x 23	2
RL-10031	113	CAB-17C3	31 x 17.5 x 23	2
RL-10032	121	CAB-17C3	31 x 17.5 x 23	2
RL-10033	158	CAB-17C3	31 x 17.5 x 23	2
RL-13031	113	CAB-17C3	31 x 17.5 x 23	2
RL-13032	127	CAB-17C3	31 x 17.5 x 23	2
RL-13033	148	CAB-17C3	31 x 17.5 x 23	2
RL-16031	125	CAB-17C3	31 x 17.5 x 23	2
RL-16032	135	CAB-17C3	31 x 17.5 x 23	2
RL-16033	156	CAB-17C3	31 x 17.5 x 23	2
RL-20031B14	122	CAB-17C3	31 x 17.5 x 23	2
RL-20032B14	138	CAB-17C3	31 x 17.5 x 23	2
RL-20033B14	184	CAB-17C3	31 x 17.5 x 23	2
RL-25031B14	131	CAB-17C3	31 x 17.5 x 23	2
RL-25032B14	164	CAB-17C3	31 x 17.5 x 23	2
RL-25033B14	209	CAB-17C3	31 x 17.5 x 23	2
RL-32031B14	164	CAB-17C3	31 x 17.5 x 23	2
RL-32032B14	186	CAB-17C3	31 x 17.5 x 23	2
RL-32033B14	244	CAB-17C3	31 x 17.5 x 23	2
RL-40031B14	168	CAB-17C3	31 x 17.5 x 23	2
RL-40032B14	202	CAB-17C3	31 x 17.5 x 23	2
RL-40033B14	233	CAB-17C3	31 x 17.5 x 23	2
RL-50031B14	177	CAB-17C3	31 x 17.5 x 23	2
RL-50032	283	CAB-26C3	47 x 27 x 24	3
RL-50033	375	CAB-26C3	47 x 27 x 24	3
RL-60031	285	CAB-26C3	47 x 27 x 24	3
RL-60032	340	CAB-26C3	47 x 27 x 24	3
RL-60033	435	CAB-26C3	47 x 27 x 24	3
RL-75031	305	CAB-26C3	47 x 27 x 24	3
RL-75032	355	CAB-26C3	47 x 27 x 24	3
RL-75033	430	CAB-26C3	47 x 27 x 24	3
RL-85031B14	360	CAB-26C3	47 x 27 x 24	3
RL-85032B14	380	CAB-26C3	47 x 27 x 24	3
RL-85033B14	546	CAB-26D3	72 x 26.5 x 25	3
RL-90031B14	431	CAB-26D3	72 x 26.5 x 25	3
RL-90032B14	446	CAB-26D3	72 x 26.5 x 25	3
RL-90033B14	546	CAB-26D3	72 x 26.5 x 25	3
RL-100031B14	375	CAB-26D3	72 x 26.5 x 25	3
RL-100032B14	446	CAB-26D3	72 x 26.5 x 25	3
RL-100033B14	546	CAB-26D3	72 x 26.5 x 25	3
RL-120031B14	426	CAB-26D3	72 x 26.5 x 25	3
RL-120032B14	506	CAB-26D3	72 x 26.5 x 25	3
RL-120033B14	621	CAB-26D3	72 x 26.5 x 25	3
RL-140031	814	CAB-42C3	72 x 42.6 x 40	3
RL-140032	839	CAB-42C3	72 x 42.6 x 40	3
RL-140033	1164	CAB-42C3	72 x 42.6 x 40	3
RL-150031	949	CAB-42C3	72 x 42.6 x 40	3
RL-150032	989	CAB-42C3	72 x 42.6 x 40	3
RL-150033	1214	CAB-42C3	72 x 42.6 x 40	3



Reactors

RL Reactors

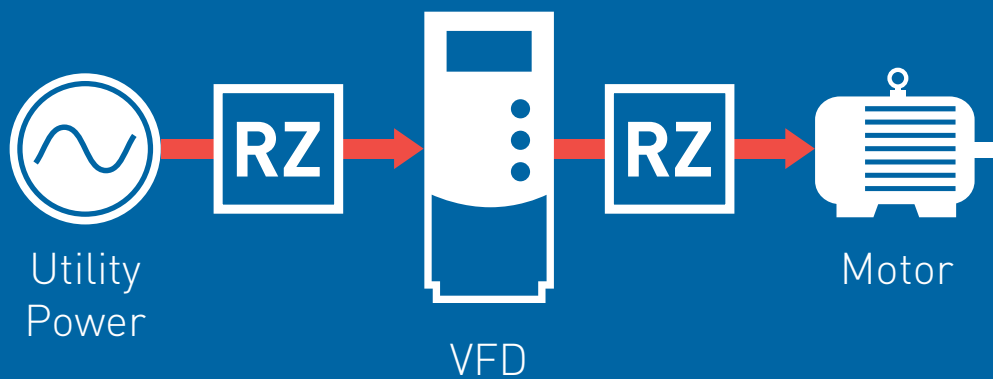
Best-in-class power quality units for absorbing power line disturbances

RLW Reactors

State-of-the-art solution for absorbing everyday power line disturbances

DC Link Chokes

The cost-effective, versatile solution to solving power quality problems



RLW Reactors

Product Selector



- **Proven performance in the field**
- **Reliable and economical**
- **Compact and light-weight**
- **Ideal for OEMs, integrators and panel builders**

Smaller. Lighter.

Our RLW Line/Load Reactors are a state-of-the-art solution for absorbing everyday power line disturbances that can damage or shut down variable frequency drives (VFDs) and other sensitive equipment. They work on both the line side and load side to give you an economical way to reduce nuisance tripping, reduce harmonic distortion and minimize long lead effects. Their epoxy impregnated design also reduces audible noise, and improves structural and moisture integrity.

Put an end to power spike issues and minimize downtime with our RLW Line/Load Reactors from MTE.

Stop nuisance tripping and harmonic distortion with our RLW Reactors.

Our RLW Reactors are the state-of-the-art filtering solution for virtually any 4 or 6-pulse rectifier or power conversion unit. There are units available for amperage ratings from 0.5A to 750A. Our 3% impedance option is 90% effective and our 5% option extends spike protection to 99%.

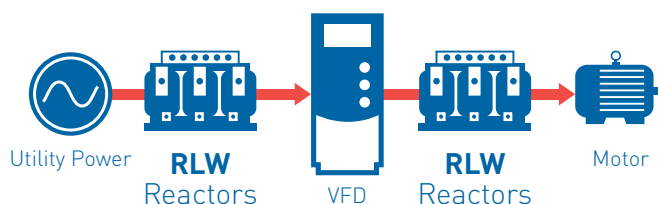
Smaller size and weight makes these units ideal for OEMs, integrators and panel builders.

Wider range of impedance values for accurate and cost-effective selection.

DIN Rail mounting options for easy panel installation.

UL/cUL listed and CE marked for all your installation requirements.

RLW Reactors

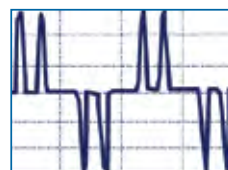


Performance Specifications

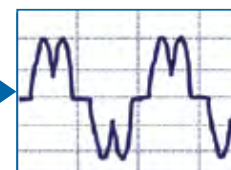
Impedance Levels	1.5%, 3% and 5%
Continuous Service Factor	100%
Overload Rating - Line Side	150% of RMS rating for 1 minute 200% of RMS rating for 10 seconds
Input Voltage Range	208V - 690V
Current Range	0.5A - 750A
Temperature Rise	140°C
Ambient Temperature	-40°C to 50°C
Altitude Maximum Without Derating	1,000 meters
Fundamental Frequency	50/60 Hz
Inductance Curve	100% at 100% Current 80% at 150% Current 50% at 200% Current

Final product specifications subject to change at anytime.

MTE Input Reactor

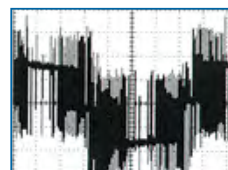


Waveform without reactor

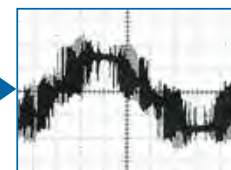


Waveform with reactor

MTE Output Reactor

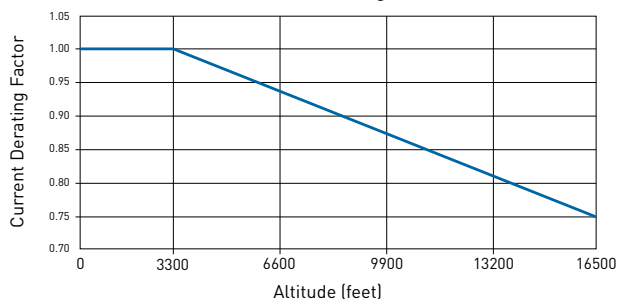


Waveform without reactor

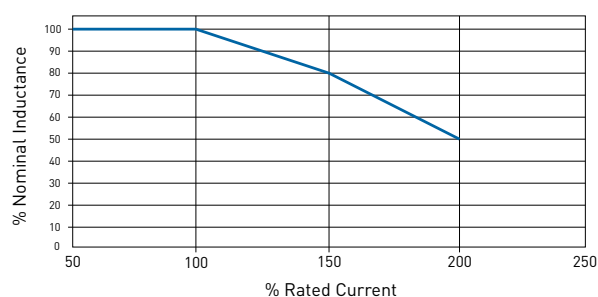


Waveform with reactor

Altitude Derating Curve



RLW Inductance Curve



ENCLOSURES

FIGURE 1

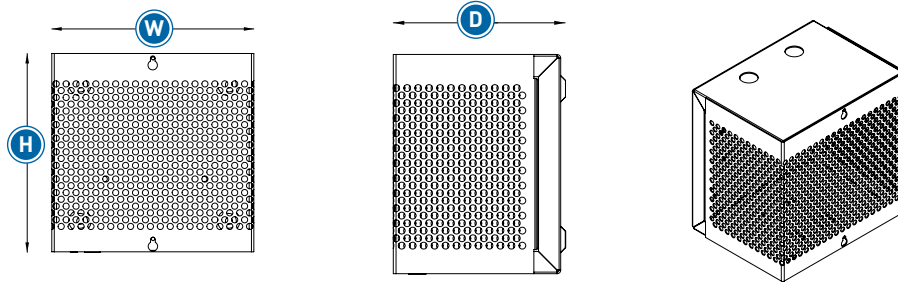
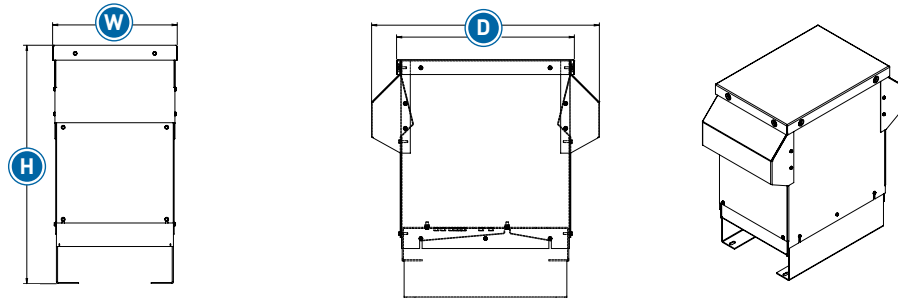


FIGURE 2



NOTE: HOODS
ONLY ON NEMA
3R ENCLOSURES

FIGURE 3

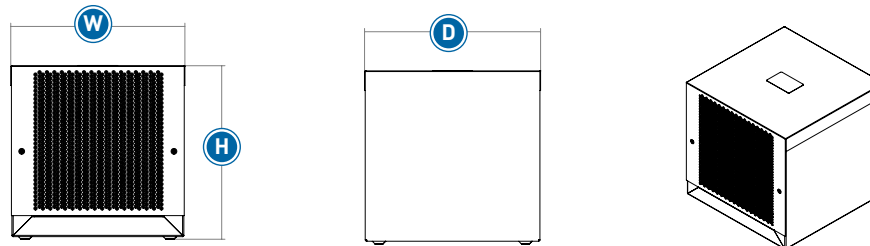
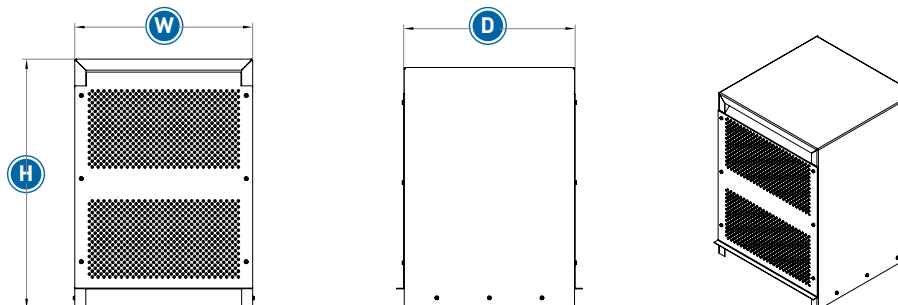


FIGURE 4



Note: Figure illustrations are for reference only. Actual hardware may differ. Please visit mtecorp.com for detailed information

RLW REACTOR SELECTION TABLES

Phase	Input Voltage & Hz	% Impedance	0.25 HP 0.18 kw	0.33 HP 0.25 kw	0.5 HP 0.37 kw	0.75 HP 0.55 kw	1.0 HP 0.75 kw	1.5 HP 1.1 kw	2.0 HP 1.5 kw	3.0 HP 2.2 kw	5.0 HP 3.7 kw	7.5 HP 5.5 kw	10.0 HP 7.5 kw	15.0 HP 11.0 kw	20.0 HP 15.0 kw	25.0 HP 18.5 kw
Three Phase Input Applications Selected by Motor																
3 Phase	208V 60 Hz	3%	RLW-01P601	RLW-02P101	RLW-03P401	RLW-04P801	RLW-04P801	RLW-07P601	RLW-07P601	RLW-001101	RLW-002101	RLW-002801	RLW-003501	RLW-005501	RLW-006501	RLW-008301
3 Phase	208V 60 Hz	5%	RLW-01P603	RLW-02P103	RLW-03P403	RLW-04P803	RLW-07P603	RLW-07P603	RLW-001103	RLW-001403	RLW-002103	RLW-002803	RLW-004603	RLW-006503	RLW-008303	RLW-010403
3 Phase	240V 60 Hz	3%	RLW-01P601	RLW-02P101	RLW-03P401	RLW-03P401	RLW-04P801	RLW-07P601	RLW-07P601	RLW-001101	RLW-002101	RLW-002801	RLW-002801	RLW-004601	RLW-005501	RLW-008301
3 Phase	240V 60 Hz	5%	RLW-01P603	RLW-02P103	RLW-03P403	RLW-03P403	RLW-04P803	RLW-07P603	RLW-07P603	RLW-001103	RLW-002103	RLW-002803	RLW-003503	RLW-004603	RLW-006503	RLW-008303
3 Phase	400V 50 Hz	3%	RLW-0P7505	RLW-0P7503	RLW-01P605	RLW-02P103	RLW-03P405	RLW-03P403	RLW-04P803	RLW-07P605	RLW-001105	RLW-001405	RLW-002105	RLW-002805	RLW-003503	RLW-003503
3 Phase	400V 50 Hz	5%	RLW-0P7506	RLW-0P7505	RLW-01P606	RLW-02P106	RLW-03P406	RLW-03P405	RLW-04P806	RLW-07P606	RLW-001106	RLW-001406	RLW-002106	RLW-002806	RLW-003505	RLW-003505
3 Phase	480V 60 Hz	3%	RLW-0P7503	RLW-01P605	RLW-01P103	RLW-01P603	RLW-02P103	RLW-03P403	RLW-03P403	RLW-04P803	RLW-07P603	RLW-001103	RLW-001403	RLW-002103	RLW-002803	RLW-003503
3 Phase	480V 60 Hz	5%	RLW-0P7506	RLW-01P106	RLW-01P105	RLW-01P605	RLW-02P105	RLW-03P405	RLW-03P405	RLW-04P805	RLW-07P605	RLW-001105	RLW-001405	RLW-002105	RLW-002805	RLW-003505
3 Phase	600V 60 Hz	3%	RLW-00P505	RLW-0P7505	RLW-01P105	RLW-01P605	RLW-02P105	RLW-03P405	RLW-03P405	RLW-04P805	RLW-07P605	RLW-001105	RLW-001103	RLW-002105	RLW-002805	RLW-002803
3 Phase	600V 60 Hz	5%	RLW-00P506	RLW-0P7506	RLW-01P106	RLW-01P606	RLW-02P106	RLW-03P406	RLW-03P406	RLW-04P806	RLW-07P606	RLW-001106	RLW-001106	RLW-002106	RLW-002806	RLW-002806
3 Phase	690V 50 Hz	2%	-	-	-	-	-	-	-	RLW-03P403	RLW-04P803	RLW-07P603	RLW-001105	RLW-001403	RLW-002105	RLW-002103
3 Phase	690V 50 Hz	3%	-	-	-	-	-	-	-	RLW-03P406	RLW-04P805	RLW-07P606	RLW-001106	RLW-001405	RLW-002106	RLW-002105
Single Phase Input Applications																
1 Phase	400V 50 Hz	5%	RLW-01P105	RLW-01P606	RLW-02P105	RLW-03P405	RLW-04P805	RLW-07P606	RLW-07P605	RLW-001106	RLW-001405	RLW-002105	RLW-002805	RLW-004605	RLW-005505	RLW-006505
1 Phase	480V 60 Hz	5%	RLW-01P606	RLW-01P605	RLW-02P105	RLW-03P405	RLW-04P806	RLW-07P606	RLW-07P606	RLW-001106	RLW-001405	RLW-002105	RLW-002805	RLW-004605	RLW-005505	RLW-006505
1 Phase	600V 60 Hz	5%	RLW-01P106	RLW-01P105	RLW-01P605	RLW-03P406	RLW-03P406	RLW-04P806	RLW-04P805	RLW-07P606	RLW-001106	RLW-002106	RLW-002106	RLW-003505	RLW-004605	RLW-005505
Three Phase Output Selected by Motor																
3 Phase	480V 60 Hz	1.5%	RLW-01P101	RLW-01P101	RLW-01P601	RLW-02P101	RLW-03P403	RLW-04P803	RLW-04P801	RLW-07P601	RLW-001101	RLW-001401	RLW-002101	RLW-002801	RLW-003501	RLW-004601
3 Phase	600V 60 Hz	1.5%	RLW-0P7503	RLW-01P103	RLW-01P603	RLW-02P103	RLW-02P101	RLW-03P403	RLW-03P403	RLW-07P603	RLW-001103	RLW-001403	RLW-001403	RLW-002803	RLW-002803	RLW-003501
3 Phase	690V 50 Hz	1.5%	-	-	-	-	-	-	-	RLW-04P805	RLW-07P605	RLW-001105	RLW-001103	RLW-002105	RLW-002103	RLW-002803

Note: The recommended reactor selections above are based on fundamental current ratings. Contact appengrg@mtecorp.com with any questions regarding the proper reactor selection.

Impedance Rating:

1.5% impedance reactors are the recommended maximum impedance for load side reactor applications.

3% impedance reactors are typically sufficient to absorb power line spikes and motor current surges. They will prevent nuisance tripping of drives or circuit breakers in most applications.

5% impedance reactors are best for reducing harmonic currents and frequencies. Use them when you must reduce VFD drive generated harmonics, and to reduce motor operating temperature, or to reduce motor noise.

*The effective impedance of the reactor changes with actual RMS current. A 5% impedance reactor becomes 3% if its current is reduced to 60%.

30.0 HP 22.0 kw	40.0 HP 30.0 kw	50.0 HP 37.5 kw	60.0 HP 45.0 kw	75.0 HP 55.0 kw	100.0 HP 75.0 kw	125.0 HP 93.0 kw	150.0 HP 112.0 kw	200.0 HP 150.0 kw	250.0 HP 187.0 kw	300.0 HP 225.0 kw	350.0 HP 262.0 kw	400.0 HP 300.0 kw	500.0 HP 375.0 kw	600.0 HP 450.0 kw	700.0 HP 550.0 kw	800.0 HP 600.0 kw
Three Phase Input Applications Selected by Motor																
RLW-010401	RLW-013001	RLW-016001	RLW-020001	RLW-025001	RLW-032201	RLW-041401	RLW-051501	RLW-060001	RLW-075001	-	-	-	-	-	-	-
RLW-010403	RLW-013003	RLW-020003	RLW-020003	RLW-025003	RLW-032203	RLW-051503	RLW-041401	RLW-075003	RLW-075001	-	-	-	-	-	-	-
RLW-008301	RLW-010401	RLW-013001	RLW-016001	RLW-020001	RLW-025001	RLW-032201	RLW-041401	RLW-051501	RLW-060001	RLW-075001	-	-	-	-	-	-
RLW-010403	RLW-013003	RLW-016003	RLW-020003	RLW-020003	RLW-032203	RLW-032203	RLW-041403	RLW-060003	RLW-075003	RLW-075003	-	-	-	-	-	-
RLW-004603	RLW-006503	RLW-008303	RLW-008303	RLW-010403	RLW-016003	RLW-020003	RLW-020003	RLW-032203	RLW-041403	RLW-041403	RLW-051503	RLW-051503	RLW-075003	-	-	-
RLW-004605	RLW-006505	RLW-008305	RLW-008305	RLW-010405	RLW-016005	RLW-020005	RLW-020005	RLW-032205	RLW-041405	RLW-041405	RLW-051505	RLW-060005	RLW-075005	-	-	-
RLW-004603	RLW-005503	RLW-006503	RLW-008303	RLW-010403	RLW-013003	RLW-016003	RLW-020003	RLW-025003	RLW-032203	RLW-041403	RLW-051503	RLW-051503	RLW-075003	RLW-075003	-	-
RLW-004605	RLW-005505	RLW-006505	RLW-008305	RLW-010405	RLW-013005	RLW-016005	RLW-020005	RLW-025005	RLW-032205	RLW-041405	RLW-051505	RLW-051505	RLW-060005	RLW-075005	-	-
RLW-003503	RLW-004603	RLW-005503	RLW-006503	RLW-008303	RLW-010403	RLW-013003	RLW-016003	RLW-020003	RLW-025003	RLW-032203	RLW-041403	RLW-041403	RLW-051503	RLW-060003	RLW-075003	-
RLW-003505	RLW-004605	RLW-005505	RLW-006505	RLW-008305	RLW-010405	RLW-013005	RLW-016005	RLW-020005	RLW-025005	RLW-032205	RLW-041405	RLW-041405	RLW-051505	RLW-060005	RLW-075005	-
RLW-002803	RLW-003503	RLW-004603	RLW-005503	RLW-006503	RLW-008303	RLW-010403	RLW-013003	RLW-016003	RLW-020003	RLW-025003	RLW-032205	RLW-032203	RLW-041403	RLW-051503	RLW-051503	RLW-060003
RLW-002806	RLW-003505	RLW-004605	RLW-005505	RLW-006505	RLW-008305	RLW-010405	RLW-013005	RLW-016005	RLW-020005	RLW-025005	RLW-032205	RLW-032205	RLW-041405	RLW-051505	RLW-051505	RLW-060005
Single Phase Input Applications																
RLW-008305	RLW-010405	RLW-013005	RLW-016005	RLW-020005	RLW-025005	RLW-032205	RLW-041405	RLW-060005	RLW-060005	RLW-075005	-	-	-	-	-	-
RLW-008305	RLW-010405	RLW-013005	RLW-016005	RLW-020005	RLW-025005	RLW-032205	RLW-032205	RLW-051505	RLW-060005	RLW-075005	RLW-075005	-	-	-	-	-
RLW-006505	RLW-008305	RLW-010405	RLW-013005	RLW-016005	RLW-020005	RLW-025007	RLW-025005	RLW-041405	RLW-051505	RLW-051505	RLW-060005	RLW-075005	-	-	-	-
Three Phase Output Selected by Motor																
RLW-005501	RLW-006501	RLW-008301	RLW-010401	RLW-013001	RLW-016001	RLW-020001	RLW-025001	RLW-032201	RLW-041401	RLW-051501	RLW-060001	RLW-060001	RLW-075001	-	-	-
RLW-004603	RLW-005501	RLW-006501	RLW-008303	RLW-010403	RLW-013003	RLW-016001	RLW-020003	RLW-025003	RLW-032201	RLW-041401	RLW-051503	RLW-051501	RLW-060001	RLW-075001	-	-
RLW-003503	RLW-004603	RLW-005503	RLW-006503	RLW-008303	RLW-010403	RLW-013003	RLW-016003	RLW-020003	RLW-025003	RLW-032203	RLW-032203	RLW-041403	RLW-051503	RLW-060003	RLW-075003	RLW-075003

Note: The recommended reactor selections above are based on fundamental current ratings. Contact appengrg@mtecorp.com with any questions regarding the proper reactor selection.

RLW REACTOR SELECTION TABLES

Open					
Open Part Number	Amps Rating	Inductance mh	Watts Loss	Open Weight (lbs)	Size (In) (H x W x D)
RLW-00P501	0.5	22	2.3	1.5	3.7 X 4.5 X 1.5
RLW-00P503	0.5	46	3.6	1.6	3.7 X 4.5 X 1.5
RLW-00P505	0.5	74	4.8	1.7	3.7 X 4.5 X 1.5
RLW-00P506	0.5	92	5.4	1.7	3.7 X 4.5 X 1.5
RLW-0P7501	0.75	15	4.2	1.5	3.7 X 4.5 X 1.5
RLW-0P7503	0.75	31	6.6	1.6	3.7 X 4.5 X 1.5
RLW-0P7505	0.75	49	8.8	1.6	3.7 X 4.5 X 1.5
RLW-0P7506	0.75	61	10.1	1.6	3.7 X 4.5 X 1.5
RLW-01P101	1.1	10	4.8	1.5	3.7 X 4.5 X 1.5
RLW-01P103	1.1	21	7.8	1.6	3.7 X 4.5 X 1.5
RLW-01P105	1.1	33	10.1	1.6	3.7 X 4.5 X 1.5
RLW-01P106	1.1	42	11.9	1.7	3.7 X 4.5 X 1.5
RLW-01P601	1.6	6.9	6.9	1.6	3.7 X 4.5 X 1.5
RLW-01P603	1.6	14	10.9	1.6	3.7 X 4.5 X 1.5
RLW-01P605	1.6	23	15	1.7	3.7 X 4.5 X 1.5
RLW-01P606	1.6	29	17.7	1.8	3.7 X 4.5 X 1.5
RLW-02P101	2.1	5.3	9	1.6	3.7 X 4.5 X 1.5
RLW-02P103	2.1	11	14.3	1.7	3.7 X 4.5 X 1.5
RLW-02P105	2.1	18	19.6	1.8	3.7 X 4.5 X 1.5
RLW-02P106	2.1	22	22.3	1.8	3.7 X 4.5 X 1.5
RLW-03P401	3.4	3.2	12.3	1.6	3.7 X 4.5 X 1.5
RLW-03P403	3.4	6.8	19.6	1.8	3.7 X 4.5 X 1.5
RLW-03P405	3.4	11	13.8	2.7	5 X 4.4 X 2.8
RLW-03P406	3.4	14	23	2.8	5 X 4.4 X 2.8
RLW-04P801	4.8	2.3	19.2	1.7	3.7 X 4.5 X 1.5
RLW-04P803	4.8	4.8	26.5	1.8	3.7 X 4.5 X 1.5
RLW-04P805	4.8	7.7	31.5	2.7	5 X 4.4 X 2.8
RLW-04P806	4.8	10	37.5	4	5 X 4.4 X 3.1
RLW-07P601	7.6	1.5	40.1	1.7	3.7 X 4.5 X 1.5
RLW-07P603	7.6	3	37.2	2.7	5 X 4.4 X 2.8
RLW-07P605	7.6	4.8	47.8	4.1	5 X 4.4 X 3.1
RLW-07P606	7.6	6	53.8	4.2	5 X 4.4 X 3.1
RLW-001101	11	1	26.8	2.7	5 X 4.4 X 2.8
RLW-001103	11	2.1	40.9	4.2	5 X 4.4 X 3.1
RLW-001105	11	3.3	54.4	5.3	5 X 4.4 X 3.5
RLW-001106	11	4.3	59.1	6.5	5.8 X 6 X 2.9
RLW-001401	14	0.79	32.7	2.8	5.3 X 4.4 X 2.8
RLW-001403	14	1.6	48.2	4.3	5 X 4.4 X 3.1
RLW-001405	14	2.6	60.6	6.5	5.8 X 6 X 2.9
RLW-001406	14	3.3	66	8.8	5.8 X 6 X 3.3
RLW-002101	21	0.53	38.3	4.2	5.3 X 4.4 X 3.3
RLW-002103	21	1.1	57.4	6.6	6.1 X 6 X 2.9
RLW-002105	21	1.8	73.5	9.2	6.1 X 6 X 3.3
RLW-002106	21	2.2	78	13.3	7 X 7.2 X 3.8
RLW-002801	28	0.39	48.2	5.1	5.3 X 4.4 X 3.5
RLW-002803	28	0.82	66.8	8.8	6.1 X 6 X 3.3
RLW-002805	28	1.3	93.8	13.7	6.1 X 6 X 3.3
RLW-002806	28	1.6	110.6	14.3	7 X 7.2 X 3.8
RLW-003501	35	0.35	68.6	10	6 X 6 X 3.5
RLW-003503	35	0.71	102.9	13	6 X 7.2 X 3.75
RLW-003505	35	1.2	121.9	18	6 X 7.2 X 4.3
RLW-003507	35	2.12	204	18.3	8.3 X 9 X 4.6
RLW-004601	46	0.3	77.9	13	6 X 7.2 X 3.75
RLW-004603	46	0.55	99.8	17	6 X 7.2 X 4.3

Open					
Open Part Number	Amps Rating	Inductance mh	Watts Loss	Open Weight (lbs)	Size (In) (H x W x D)
RLW-004605	46	0.98	179.3	24	8.3 X 9 X 4.8
RLW-004607	46	1.6	250	26.6	8.3 X 9 X 5.1
RLW-005501	55	0.27	67.5	18	6 X 7.2 X 4
RLW-005503	55	0.48	109.7	20	6 X 7.2 X 4.25
RLW-005505	55	0.75	149.7	26	7 X 9 X 6.5
RLW-005507	55	1.33	283	35	7 X 9 X 7.25
RLW-006501	65	0.19	87.4	18	6 X 7.2 X 4
RLW-006503	65	0.36	105.3	22	6 X 7.2 X 4.25
RLW-006505	65	0.64	214.5	26	7 X 9 X 6.5
RLW-006507	65	1.1	191	44	7 X 9 X 7.25
RLW-008301	83	0.17	119.3	19	6 X 7.2 X 4.25
RLW-008303	83	0.29	155.1	26	7 X 9 X 6.5
RLW-008305	83	0.51	197.5	35	7 X 9 X 6.75
RLW-008307	83	0.91	240	54	7 X 9 X 7.25
RLW-010401	104	0.12	94	22	6 X 7.2 X 6.5
RLW-010403	104	0.23	199.5	28	7 X 9 X 7
RLW-010405	104	0.375	208.6	41	7 X 9 X 7.25
RLW-010407	104	0.67	256	57	7 X 9 X 7.75
RLW-013001	130	0.095	131.5	26	7.5 X 9.25 X 6.75
RLW-013003	130	0.18	152.5	37	7.5 X 9.25 X 6.75
RLW-013005	130	0.3	197.6	52	7.5 X 9.25 X 8.25
RLW-013007	130	0.56	480	80	8.75 X 10.8 X 9
RLW-016001	160	0.08	109.5	34	7.5 X 9.25 X 6.75
RLW-016003	160	0.155	194.5	49	7.5 X 9.25 X 8.25
RLW-016005	160	0.26	309.3	53	7.5 X 9.25 X 8.25
RLW-016007	160	0.47	561	75	8.75 X 10.8 X 9.5
RLW-020001	200	0.06	158.5	34	7.5 X 9.25 X 7
RLW-020003	200	0.115	223.5	49	7.5 X 9.25 X 8.25
RLW-020005	200	0.2	293	75	8.25 X 10.8 X 9
RLW-020007	200	0.34	509	91	8.75 X 10.8 X 10
RLW-025001	250	0.05	275.6	35	7.5 X 9.25 X 7.5
RLW-025003	250	0.095	284.2	55	7.5 X 9.25 X 8.5
RLW-025005	250	0.16	402	75	8.75 X 10.8 X 9
RLW-025007	250	0.27	465	121	8.5 X 10.8 X 11.75
RLW-032201	322	0.05	300	57	7.5 X 9.25 X 9
RLW-032203	322	0.07	383	76	8.75 X 10.8 X 8.5
RLW-032205	322	0.13	494	108	8.75 X 9 X 11
RLW-032207	322	0.225	780	172	11.5 X 14.4 X 12.5
RLW-041401	414	0.033	333	78	8.75 X 9 X 9.5
RLW-041403	414	0.066	531	98	8.75 X 9 X 11.5
RLW-041405	414	0.11	588	125	8.75 X 9 X 12.5
RLW-041407	414	0.185	1007	210	11.5 X 14.4 X 13.5
RLW-051501	515	0.025	314	81	8.75 X 9 X 9.5
RLW-051503	515	0.05	496	118	8.75 X 9 X 12
RLW-051505	515	0.08	695	193	11.5 X 14.4 X 13.5
RLW-051507	515	0.15	1096	248	11.5 X 14.4 X 13.75
RLW-060001	600	0.02	375	86	8.75 X 9 X 10.5
RLW-060003	600	0.04	747	144	11.5 X 14.4 X 12.5
RLW-060005	600	0.065	780	204	11.5 X 14.4 X 13.75
RLW-060007	600	0.12	1190	292	11.5 X 14.4 X 15.5
RLW-075001	750	0.017	468	105	8.75 X 9 X 11.5
RLW-075003	750	0.035	838	179	11.5 X 14.4 X 12.5
RLW-075005	750	0.055	858	245	11.5 X 14.4 X 15
RLW-075007	750	0.095	1426	348	11.5 X 14.4 X 22

Note: Weights and dimensions are for reference only. Please visit mtec corp.com for detailed information.

NEMA 1/2				
Part Number	Weight (lbs)	Cabinet	Size (In) (H x W x D)	Ref Figure
RLW-00P511	8.5	CAB-8	8 X 8 X 6	1
RLW-00P513	8.6	CAB-8	8 X 8 X 6	1
RLW-00P515	8.7	CAB-8	8 X 8 X 6	1
RLW-00P516	8.7	CAB-8	8 X 8 X 6	1
RLW-0P7511	8.5	CAB-8	8 X 8 X 6	1
RLW-0P7513	8.6	CAB-8	8 X 8 X 6	1
RLW-0P7515	8.6	CAB-8	8 X 8 X 6	1
RLW-0P7516	8.6	CAB-8	8 X 8 X 6	1
RLW-01P111	8.5	CAB-8	8 X 8 X 6	1
RLW-01P113	8.6	CAB-8	8 X 8 X 6	1
RLW-01P115	8.6	CAB-8	8 X 8 X 6	1
RLW-01P116	8.7	CAB-8	8 X 8 X 6	1
RLW-01P611	8.6	CAB-8	8 X 8 X 6	1
RLW-01P613	8.6	CAB-8	8 X 8 X 6	1
RLW-01P615	8.7	CAB-8	8 X 8 X 6	1
RLW-01P616	8.8	CAB-8	8 X 8 X 6	1
RLW-02P111	8.6	CAB-8	8 X 8 X 6	1
RLW-02P113	8.7	CAB-8	8 X 8 X 6	1
RLW-02P115	8.8	CAB-8	8 X 8 X 6	1
RLW-02P116	8.8	CAB-8	8 X 8 X 6	1
RLW-03P411	8.6	CAB-8	8 X 8 X 6	1
RLW-03P413	8.8	CAB-8	8 X 8 X 6	1
RLW-03P415	9.7	CAB-8	8 X 8 X 6	1
RLW-03P416	9.8	CAB-8	8 X 8 X 6	1
RLW-04P811	8.7	CAB-8	8 X 8 X 6	1
RLW-04P813	8.8	CAB-8	8 X 8 X 6	1
RLW-04P815	9.7	CAB-8	8 X 8 X 6	1
RLW-04P816	11	CAB-8	8 X 8 X 6	1
RLW-07P611	8.7	CAB-8	8 X 8 X 6	1
RLW-07P613	9.7	CAB-8	8 X 8 X 6	1
RLW-07P615	11.1	CAB-8	8 X 8 X 6	1
RLW-07P616	11.2	CAB-8	8 X 8 X 6	1
RLW-001111	9.7	CAB-8	8 X 8 X 6	1
RLW-001113	11.2	CAB-8	8 X 8 X 6	1
RLW-001115	12.3	CAB-8	8 X 8 X 6	1
RLW-001116	13.5	CAB-8	8 X 8 X 6	1
RLW-001411	9.8	CAB-8	8 X 8 X 6	1
RLW-001413	11.3	CAB-8	8 X 8 X 6	1
RLW-001415	13.5	CAB-8	8 X 8 X 6	1
RLW-001416	26.8	CAB-13V	13 X 13 X 13	3
RLW-002111	22.2	CAB-13V	13 X 13 X 13	3
RLW-002113	24.6	CAB-13V	13 X 13 X 13	3
RLW-002115	27.2	CAB-13V	13 X 13 X 13	3
RLW-002116	31.3	CAB-13V	13 X 13 X 13	3
RLW-002811	23.1	CAB-13V	13 X 13 X 13	3
RLW-002813	26.8	CAB-13V	13 X 13 X 13	3
RLW-002815	31.7	CAB-13V	13 X 13 X 13	3
RLW-002816	32.3	CAB-13V	13 X 13 X 13	3
RLW-003511	28	CAB-13V	13 X 13 X 13	3
RLW-003513	31	CAB-13V	13 X 13 X 13	3
RLW-003515	36	CAB-13V	13 X 13 X 13	3
RLW-003517	36.3	CAB-13V	13 X 13 X 13	3
RLW-004611	31	CAB-13V	13 X 13 X 13	3
RLW-004613	35	CAB-13V	13 X 13 X 13	3

NEMA 1/2				
Part Number	Weight (lbs)	Cabinet	Size (In) (H x W x D)	Ref Figure
RLW-004615	42	CAB-13V	13 X 13 X 13	3
RLW-004617	44.6	CAB-13V	13 X 13 X 13	3
RLW-005511	36	CAB-13V	13 X 13 X 13	3
RLW-005513	38	CAB-13V	13 X 13 X 13	3
RLW-005515	44	CAB-13V	13 X 13 X 13	3
RLW-005517	53	CAB-13V	13 X 13 X 13	3
RLW-006511	36	CAB-13V	13 X 13 X 13	3
RLW-006513	40	CAB-13V	13 X 13 X 13	3
RLW-006515	44	CAB-13V	13 X 13 X 13	3
RLW-006517	62	CAB-13V	13 X 13 X 13	3
RLW-008311	37	CAB-13V	13 X 13 X 13	3
RLW-008313	44	CAB-13V	13 X 13 X 13	3
RLW-008315	53	CAB-13V	13 X 13 X 13	3
RLW-008317	72	CAB-13V	13 X 13 X 13	3
RLW-010411	40	CAB-13V	13 X 13 X 13	3
RLW-010413	46	CAB-13V	13 X 13 X 13	3
RLW-010415	59	CAB-13V	13 X 13 X 13	3
RLW-010417	75	CAB-13V	13 X 13 X 13	3
RLW-013011	44	CAB-13V	13 X 13 X 13	3
RLW-013013	55	CAB-13V	13 X 13 X 13	3
RLW-013015	70	CAB-13V	13 X 13 X 13	3
RLW-013017	98	CAB-13V	13 X 13 X 13	3
RLW-016011	52	CAB-13V	13 X 13 X 13	3
RLW-016013	67	CAB-13V	13 X 13 X 13	3
RLW-016015	77	CAB-17V	24 X 17 X 18.4	4
RLW-016017	99	CAB-17V	24 X 17 X 18.4	4
RLW-020011	58	CAB-17V	24 X 17 X 18.4	4
RLW-020013	73	CAB-17V	24 X 17 X 18.4	4
RLW-020015	99	CAB-17V	24 X 17 X 18.4	4
RLW-020017	115	CAB-17V	24 X 17 X 18.4	4
RLW-025011	59	CAB-17V	24 X 17 X 18.4	4
RLW-025013	79	CAB-17V	24 X 17 X 18.4	4
RLW-025015	99	CAB-17V	24 X 17 X 18.4	4
RLW-025017	145	CAB-17V	24 X 17 X 18.4	4
RLW-032211	81	CAB-17V	24 X 17 X 18.4	4
RLW-032213	220	CAB-26C	47 X 27 X 25	2
RLW-032215	252	CAB-26C	47 X 27 X 25	2
RLW-032217	316	CAB-26C	47 X 27 X 25	2
RLW-041411	222	CAB-26C	47 X 27 X 25	2
RLW-041413	242	CAB-26C	47 X 27 X 25	2
RLW-041415	269	CAB-26C	47 X 27 X 25	2
RLW-041417	354	CAB-26C	47 X 27 X 25	2
RLW-051511	225	CAB-26C	47 X 27 X 25	2
RLW-051513	262	CAB-26C	47 X 27 X 25	2
RLW-051515	337	CAB-26C	47 X 27 X 25	2
RLW-051517	392	CAB-26C	47 X 27 X 25	2
RLW-060011	230	CAB-26C	47 X 27 X 25	2
RLW-060013	288	CAB-26C	47 X 27 X 25	2
RLW-060015	348	CAB-26C	47 X 27 X 25	2
RLW-060017	436	CAB-26C	47 X 27 X 25	2
RLW-075011	249	CAB-26C	47 X 27 X 25	2
RLW-075013	323	CAB-26C	47 X 27 X 25	2
RLW-075015	389	CAB-26C	47 X 27 X 25	2
RLW-075017	492	CAB-26C	47 X 27 X 25	2

Note: Weights and dimensions are for reference only. Please visit mtecorp.com for detailed information.



Reactors

RL Reactors

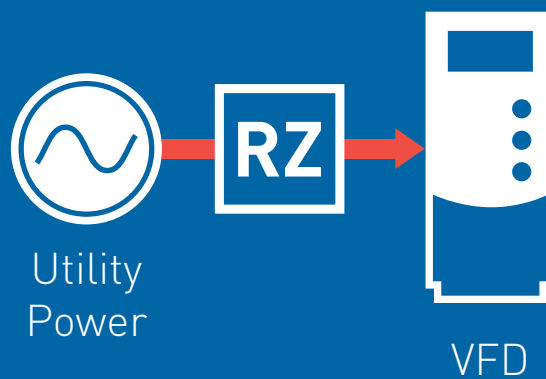
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DC Link Chokes

Product Selector



- Reduce AC input line harmonics
- Absorb voltage/current spikes
- Reduce AC ripple on DC bus
- Solve nuisance over-voltage tripping
- Reduce DC Bus transient over-voltage

Economical. Versatile.

Our DC Link Chokes are an economical means of filtering the DC bus voltage in variable frequency drives (VFDs). Designed to be added to a VFD's internal bridge and bus, they help reduce AC input line current harmonic distortion while absorbing DC bus voltage spikes. They can be used individually, typically on the positive DC bus, or in pairs with one each on both the positive and negative bus.

Take advantage of maximizing the circuit inductance for power quality reasons without causing an AC input line voltage drop with DC Link Chokes from MTE.

An economical and versatile solution to solving power quality problems.

The ability of our DC Link Chokes to be used across multiple applications is just one reason these chokes stand above the rest. With factory capabilities to customize mounting, inductance, current or ripple requirements, our DC Link Chokes will meet all of your needs.

Solid copper box lug type available on most sizes.

Specially constructed and epoxy impregnated for low noise.

Series A link chokes are also available in NEMA 1-2 or NEMA 3R enclosures upon request.

DC Link Chokes



Performance Specifications	
Component Recognized	UL-508 (File #E180243)
Maximum Voltage	1000V DC
Ripple Frequency	300 Hz or 360 Hz
Ambient Temperature	40C
Ripple Current	10% peak-to-peak
Insulation System	Class B (130C)

Final product specifications subject to change at anytime.

Useful Applications

- AC PWM inverters/drives
- Variable frequency motor drives
- DC to AC inverters
- Electrical vehicle inverters

Understanding the DC Link Choke Series A Part Number:

DC A _ _ _ X X

DC Link Choke

Series A

Current Rating

0004 is 4 Amps

0050 is 50 Amps

0200 is 200 Amps

Mechanical Configurations

0 = Open Magnetics (No Enclosure)

1 = General Purpose (NEMA 1/2)

3 = Weather (NEMA 3R)

Reactor Relative Impedance No.

1, 2, 3, 4 (1 is lowest value)

Understanding the DC Link Choke Series RB Part Number:

_ _ _ RB 00 X

Current Rating

4 is 4 Amps

50 is 50 Amps

200 is 200 Amps

Series RB

Reactor Relative Impedance No.

1, 2, 3, 4 (1 is lowest value)

1000V 360Hz

DC Amps	Inductance mH	MTE Part Number	Ref Fig	DC Amps	Inductance mH	MTE Part Number	Ref Fig	DC Amps	Inductance mH	MTE Part Number	Ref Fig	DC Amps	Inductance mH	MTE Part Number	Ref Fig
1	35.00	1RB001	1	25	0.45	25RB001	1	80	0.75	80RB004	3	300	0.08	300RB001	3
1	60.00	1RB002	1	25	1.00	25RB002	2	80	1.25	DCA008005	3	300	0.135	300RB002	3
1	80.00	1RB003	1	25	1.275	DCA002504	2	92	0.20	DCA009201	3	300	0.32	300RB003	3
2	10.00	2RB001	1	25	1.75	DCA002503	2	92	0.60	DCA009202	3	450	0.055	450RB001	4
2	15.00	2RB002	1	25	4.00	DCA002505	2	92	1.00	DCA009203	3	450	0.11	450RB002	4
2	20.00	2RB003	1	32	0.85	DCA003201	2	110	0.25	110RB001	3	450	0.14	450RB003	4
2	50.00	DCA000204	1	32	1.62	DCA003202	2	110	0.30	DCA011002	3	450	0.25	450RB004	4
4	5.00	4RB001	1	32	2.68	DCA003203	2	110	0.45	DCA011003	3	500	0.043	500RB001	4
4	12.00	DCA000402	1	40	0.50	DCA004001	2	125	0.11	125RB001	3	500	0.09	500RB002	4
4	15.00	DCA000403	1	40	0.75	DCA004002	2	125	0.22	DCA012502	3	500	0.14	500RB003	4
4	25.00	DCA000404	2	40	1.00	DCA004003	2	125	0.50	125RB003	3	500	0.19	500RB004	4
9	2.00	9RB001	1	40	2.50	DCA004004	2	125	0.85	125RB004	3	600	0.04	600RB001	4
9	3.22	DCA000902	1	50	0.625	DCA005001	2	150	0.15	150RB001	3	600	0.11	600RB002	4
9	7.50	DCA000903	2	50	0.97	50RB002	2	150	0.22	DCA015002	3	600	0.18	600RB003	4
9	11.50	DCA000904	2	50	1.35	DCA005003	2	150	0.32	150RB003	3	700	0.044	700RB001	4
12	1.00	DCA001201	1	50	2.0	DCA005004	3	150	0.65	DCA015004	3	700	0.06	700RB002	4
12	2.10	DCA001202	2	62	0.35	DCA006201	3	200	0.12	200RB001	3	700	0.15	700RB003	4
12	4.00	DCA001203	2	62	0.61	DCA006202	3	200	0.21	DCA020002	3	850	0.036	850RB001	4
12	6.00	DCA001204	2	62	0.67	62RB003	3	200	0.40	200RB003	3	850	0.065	850RB002	4
18	0.65	DCA001801	1	62	1.20	62RB004	3	200	0.50	200RB004	3	850	0.11	850RB003	4
18	1.375	DCA001802	2	62	1.50	62RB005	3	240	0.09	240RB001	3	1000	0.02	1000RB001	4
18	2.75	DCA001803	2	80	0.31	80RB001	3	240	0.25	240RB002	3	1000	0.042	1000RB002	4
18	3.75	DCA001804	2	80	0.40	DCA008002	3	240	0.35	240RB003	3	1000	0.10	1000RB003	4
18	6.00	DCA001805	2	80	0.50	80RB003	3								

OPEN MAGNETICS

FIGURE 1

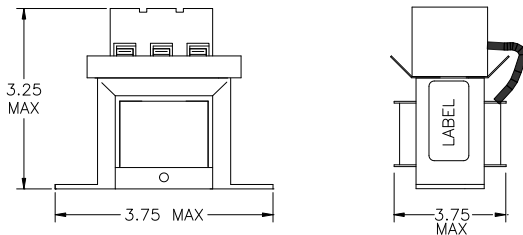


FIGURE 2

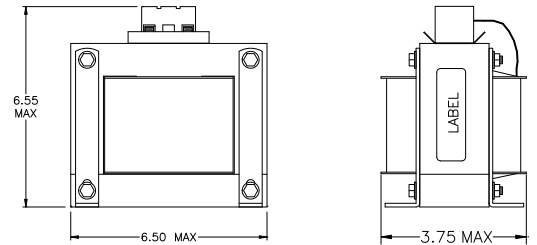


FIGURE 3

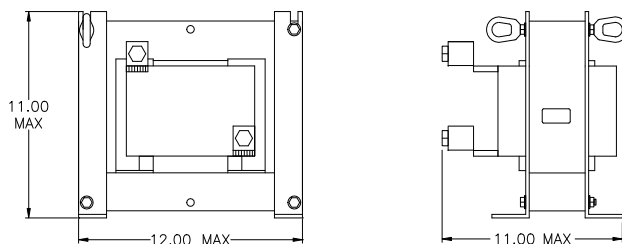
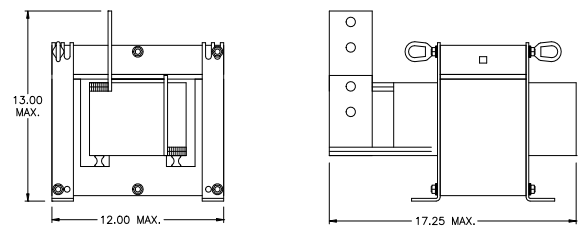


FIGURE 4



Note: Figure illustrations are for reference only. Actual hardware may differ. Please visit mtecorp.com for detailed information.



Harmonic Filters

Matrix® AP

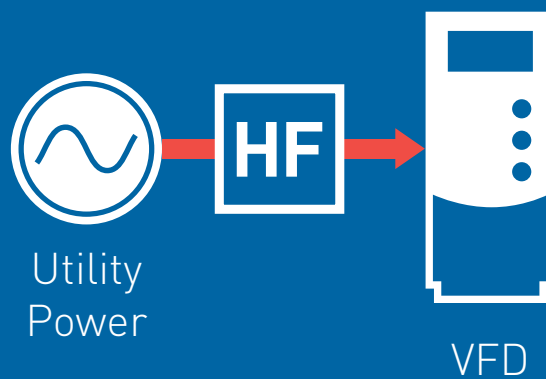
Adaptive Passive Technology for superior harmonic mitigation at varying loads

Matrix® APAX

Quality, convenient solutions for reducing harmonic distortion

Single Phase Matrix® ONE

Optimized harmonic filters with proven harmonic mitigation



Harmonic Filters **Matrix[®] AP** Product Selector



- **Adapts to varying power loads**
- **Best performance in the industry**
- **Extends the service life of electrical equipment**
- **Generator compatible**
- **Performance guarantee**

The key to success: adapt.

Simply put, our Matrix[®] AP is the most advanced passive filter on the market today. Most traditional filters work fine at 100% power load, but severely underperform at lower loads. Matrix[®] AP is different, because we know almost no one runs at full load all the time. Its patented Adaptive Passive Technology virtually eliminates harmonic distortion by adapting to varying power loads. It delivers better THID performance, increases energy efficiency and allows you to meet IEEE-519 requirements.

Its unique design generates less heat, and is easy to install and maintain. Plus it is generator compatible. With Matrix[®] AP Harmonic Filters, power quality, energy efficiency and reduced downtime are easy to achieve.

Improve power quality and reduce downtime with our patented Adaptive Passive Technology.

The best-in-class Matrix® AP Harmonic Filters can be specified for use on the input of your VFD or other 6-pulse rectifier power supply to enable your system to meet the IEEE-519 requirements for harmonic distortion, regardless of power load.

Features our patented Adaptive Passive Technology for superior harmonic mitigation and better THID performance over a wider load range.

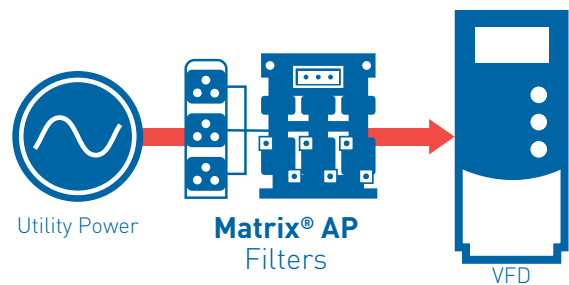
MTE performance guarantee provides peace of mind that the Matrix® AP will meet or exceed performance expectations - every time.

Extends service life of electrical equipment, especially transformers and motors, due to the virtual elimination of CEMF and the skin effect.

Alleviates system downtime by preventing blown fuses and tripped circuit breakers.

Industry leading THREE year warranty because the best products deserve the best warranty.

Matrix® AP

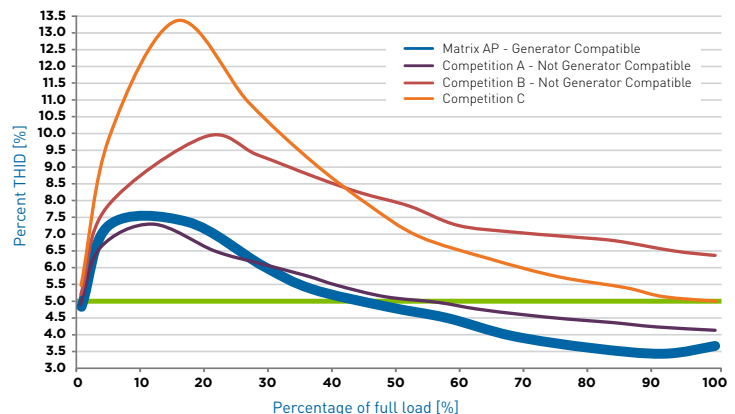


Performance Specifications

Service Load Condition	Load: 6-pulse rectifier only
Input Voltage	380V - 415V +/- 10%; 50 + 0.75Hz; 3-phase 480V +/- 10%; 60 + 0.75Hz; 3-phase 600V +/- 10%; 60 + 0.75Hz; 3-phase 690V +/- 10%; 50 + 0.75Hz; 3-phase
Maximum THID	8% @ 30% load; 5% @ full load
Maximum Ambient Temperature	-40C to +50C open panel filters; -40C to +40C - 45C enclosed filters; -40C to +90C storage
Insertion Loss @ Full Load	<4%
Efficiency	97% - 99%
Altitude Without Derating	3,300 feet above sea level
Relative Humidity	0% to 95% non-condensing
Current Rating	150% for 1 minute duration

Final product specifications subject to change at anytime.

MTE vs. Competition THID [%]

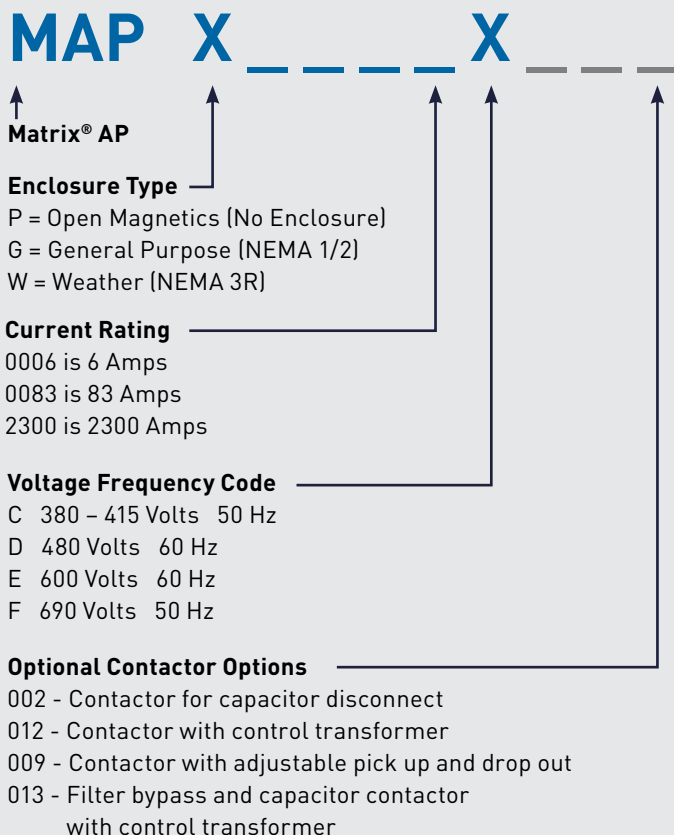


Matrix® AP Harmonic Filters can help ensure that your system meets the IEEE-519 requirements for harmonic current.

How to properly size your filter

- **Determine voltage and frequency requirements**
- **Reference motor nameplate to determine motor HP or KW and Full Load Amps**
- **Select filter based on Motor Full Load Amps**
Do not exceed filter's maximum current rating (amps)
- **Specify enclosure style**
Open (No enclosure)
NEMA 1/2 (General Purpose Enclosure)
NEMA 3R (Outdoor Enclosure)
- **Determine derating requirements**
Reference Performance Specifications table on previous page
- **Select desired options (if applicable)**

Understanding the Matrix® AP Part Number:



Matrix® AP Options

Contactor Option 002: Contactor for capacitor disconnect

- Includes NO/NC auxiliary contacts
- Wired to customer terminal block
- Pre-wired within enclosed part numbers
- Requires 120V 50/60Hz power source

Contactor Option 012: Contactor with control transformer (Only available for enclosed filters)

- Option 002 including a 120 VAC control transformer

Contactor Option 009: Contactor with adjustable pick up and drop out (Only available for enclosed filters)

- Includes NO/NC auxiliary contacts
- Includes a 120 VAC control transformer
- Includes two current operated switches
- Ability to adjust pick-up and crop current levels
- Switches are preset at factory
Pick-up is 35% of filter output current rating
Crop out is 20% of filter output current rating

Contactor Option 013: Filter bypass and capacitor contactor with control transformer (Only available for enclosed filters)

- Includes NO/NC auxiliary contacts
- Includes a 120 VAC control transformer
- Pilot relay provided to limit inrush current
- Jumper selection allows for single contact switching (Normal bypass control with capacitor removal)

Option - 400: Standard NEMA 3R enclosure with optional rodent/serpent screen.

- Provides intake exhaust air screens with (1/4 x 1/4) mesh
- Not available on units 1600A (480V) and above

MATRIX® AP SELECTION TABLES

400V 50Hz

Motor (Ref Only)	Filter Amps Rating	MTE Part Number	Enclosure Type	Filter Dimensions (H x W x D)		Approx Weight		Ref Fig	Watts Loss	Capacitor/Capacitor Panel Assembly Dimensions (H x W x D)		Qty Req'd	Ref Fig	Available Options				
				Inches	Millimeters	Lbs	Kgs			Inches	Millimeters			002	009	012	013	
1.1 - 2.2	6	MAPP0006C	OPEN	8.6 x 8.0 x 5.4	218 x 203 x 137	20	9	3	114	7.5 x 3.0	191 x 76	1	2	S	*	*	*	*
		MAPG0006C	NEMA 1/2	24.0 x 12.5 x 17.9	610 x 318 x 455	66	30	6		Preinstalled in cabinet				*	*	*	*	
		MAPW0006C	NEMA 3R	24.0 x 12.5 x 23.0	610 x 318 x 584	74	34							*	*	*	*	
-	8	MAPP0008C	OPEN	8.7 x 8.0 x 5.4	221 x 203 x 137	20	9	3	149	7.5 x 3.0	191 x 76	1	2	S	*	*	*	*
		MAPG0008C	NEMA 1/2	24.0 x 12.5 x 17.9	610 x 318 x 455	68	31	6		Preinstalled in cabinet				*	*	*	*	
		MAPW0008C	NEMA 3R	24.0 x 12.5 x 23.0	610 x 318 x 584	75	34							*	*	*	*	
3.7	11	MAPP0011C	OPEN	9.9 x 9.0 x 4.8	251 x 229 x 122	28	13	3	180	7.5 x 3.0	191 x 76	1	2	S	*	*	*	*
		MAPG0011C	NEMA 1/2	24.0 x 12.5 x 17.9	610 x 318 x 455	75	34	6		Preinstalled in cabinet				*	*	*	*	
		MAPW0011C	NEMA 3R	24.0 x 12.5 x 23.0	610 x 318 x 584	83	38							*	*	*	*	
5.5	14	MAPP0014C	OPEN	9.8 x 9.0 x 5.3	249 x 229 x 135	34	15	3	206	8.0 x 3.9	203 x 99	1	2	S	*	*	*	*
		MAPG0014C	NEMA 1/2	24.0 x 12.5 x 17.9	610 x 318 x 455	82	37	6		Preinstalled in cabinet				*	*	*	*	
		MAPW0014C	NEMA 3R	24.0 x 12.5 x 23.0	610 x 318 x 584	90	41							*	*	*	*	
7.5	21	MAPP0021C	OPEN	11.7 x 10.5 x 6.7	297 x 267 x 170	50	23	3	235	8.0 x 3.9	203 x 99	1	2	S	*	*	*	*
		MAPG0021C	NEMA 1/2	24.0 x 12.5 x 17.9	610 x 318 x 455	98	44	6		Preinstalled in cabinet				*	*	*	*	
		MAPW0021C	NEMA 3R	24.0 x 12.5 x 23.0	610 x 318 x 584	107	49							*	*	*	*	
11	27	MAPP0027C	OPEN	11.8 x 10.5 x 7.2	300 x 267 x 183	56	25	3	266	8.3 x 4.6	211 x 117	1	2	S	*	*	*	*
		MAPG0027C	NEMA 1/2	24.0 x 12.5 x 17.9	610 x 318 x 455	103	47	6		Preinstalled in cabinet				*	*	*	*	
		MAPW0027C	NEMA 3R	24.0 x 12.5 x 23.0	610 x 318 x 584	111	50							*	*	*	*	
15	34	MAPP0034C	OPEN	11.7 x 10.5 x 7.7	297 x 267 x 196	68	31	3	298	9.2 x 4.6	234 x 117	1	2	S	*	*	*	*
		MAPG0034C	NEMA 1/2	24.0 x 12.5 x 17.9	610 x 318 x 455	115	52	6		Preinstalled in cabinet				*	*	*	*	
		MAPW0034C	NEMA 3R	24.0 x 12.5 x 23.0	610 x 318 x 584	123	56							*	*	*	*	
18.5 - 22	44	MAPP0044C	OPEN	11.7 x 10.5 x 8.2	297 x 267 x 208	79	36	3	356	9.2 x 4.6	234 x 117	1	2	S	*	*	*	*
		MAPG0044C	NEMA 1/2	24.0 x 12.5 x 17.9	610 x 318 x 455	127	58	6		Preinstalled in cabinet				*	*	*	*	
		MAPW0044C	NEMA 3R	24.0 x 12.5 x 23.0	610 x 318 x 584	134	61							*	*	*	*	
-	52	MAPP0052C	OPEN	14.0 x 12.0 x 9.0	356 x 305 x 229	100	45	4	388	9.2 x 4.6	234 x 117	1	2	S	*	*	*	*
		MAPG0052C	NEMA 1/2	33.9 x 18.3 x 20.9	861 x 465 x 531	174	79	7		Preinstalled in cabinet				*	*	*	*	
		MAPW0052C	NEMA 3R	33.9 x 18.3 x 26.0	861 x 465 x 660	181	82							*	*	*	*	
30	66	MAPP0066C	OPEN	14.0 x 12.0 x 9.0	356 x 305 x 229	112	51	4	459	10.6 x 4.6	269 x 117	1	2	S	*	*	*	*
		MAPG0066C	NEMA 1/2	33.9 x 18.3 x 20.9	861 x 465 x 531	186	84	7		Preinstalled in cabinet				*	*	*	*	
		MAPW0066C	NEMA 3R	33.9 x 18.3 x 26.0	861 x 465 x 660	194	88							*	*	*	*	
37 - 45	83	MAPP0083C	OPEN	14.0 x 12.0 x 10.9	356 x 305 x 277	139	63	4	565	10.6 x 4.6	269 x 117	1	2	S	*	*	*	*
		MAPG0083C	NEMA 1/2	33.9 x 18.3 x 20.9	861 x 465 x 531	212	96	7		Preinstalled in cabinet				*	*	*	*	
		MAPW0083C	NEMA 3R	33.9 x 18.3 x 26.0	861 x 465 x 660	219	99							*	*	*	*	
55	103	MAPP0103C	OPEN	14.1 x 12.0 x 11.0	358 x 305 x 279	147	67	4	660	10.6 x 4.6	269 x 117	1	2	S	*	*	*	*
		MAPG0103C	NEMA 1/2	33.9 x 18.3 x 20.9	861 x 465 x 531	221	100	7		Preinstalled in cabinet				*	*	*	*	
		MAPW0103C	NEMA 3R	33.9 x 18.3 x 26.0	861 x 465 x 660	228	103							*	*	*	*	

Note: Weights and dimensions are for reference only. Please visit mtecorp.com for detailed information.

S = Standard stock offering

* = Call for availability

400V 50Hz

Motor (Ref Only)	Filter Amps Rating	MTE Part Number	Enclosure Type	Filter Dimensions (H x W x D)		Approx Weight		Ref Fig	Watts Loss	Capacitor/Capacitor Panel Assembly Dimensions (H x W x D)		Qty Req'd	Ref Fig	Available Options				
				Inches	Millimeters	Lbs	Kgs			Inches	Millimeters			002	009	012	013	
-	128	MAPP0128C	OPEN	20.0 x 15.3 x 10.7	508 x 389 x 272	218	99	4	973	11.1 x 16.4 x 7.6	282 x 417 x 193	1	1	S	*	*	*	*
		MAPG0128C	NEMA 1/2	51.3 x 27.7 x 24.9	1303 x 704 x 632	390	177	7		Preinstalled in cabinet				*	*	*	*	
		MAPW0128C	NEMA 3R	51.3 x 27.7 x 30.0	1303 x 704 x 762	396	180			*	*	*	*					
75 - 90	165	MAPP0165C	OPEN	20.0 x 15.3 x 11.7	508 x 389 x 297	273	124	4	1,030	6.7 x 16.4 x 7.6	170 x 417 x 193	1	1	S	*	*	*	*
		MAPG0165C	NEMA 1/2	51.3 x 27.7 x 24.9	1303 x 704 x 632	442	200	7		Preinstalled in cabinet				*	*	*	*	
		MAPW0165C	NEMA 3R	51.3 x 27.7 x 30.0	1303 x 704 x 762	455	206			*	*	*	*					
110	208	MAPP0208C	OPEN	20.1 x 15.3 x 11.8	511 x 389 x 300	290	132	4	1,263	8.0 x 16.4 x 7.6	203 x 417 x 193	1	1	S	*	*	*	*
		MAPG0208C	NEMA 1/2	51.3 x 27.7 x 24.9	1303 x 704 x 632	459	208	7		Preinstalled in cabinet				*	*	*	*	
		MAPW0208C	NEMA 3R	51.3 x 27.7 x 30.0	1303 x 704 x 762	472	214			*	*	*	*					
-	240	MAPP0240C	OPEN	19.9 x 15.3 x 12.8	505 x 389 x 325	325	147	4	1,423	8.0 x 16.4 x 7.6	203 x 417 x 193	1	1	S	*	*	*	*
		MAPG0240C	NEMA 1/2	51.3 x 27.7 x 24.9	1303 x 704 x 632	494	224	7		Preinstalled in cabinet				*	*	*	*	
		MAPW0240C	NEMA 3R	51.3 x 27.7 x 30.0	1303 x 704 x 762	507	230			*	*	*	*					
150	320	MAPP0320C	OPEN	20.0 x 15.3 x 17.8	508 x 389 x 452	421	191	4	1,450	9.9 x 16.4 x 7.6	251 x 417 x 193	1	1	S	*	*	*	*
		MAPG0320C	NEMA 1/2	76.0 x 27.7 x 24.9	1930 x 704 x 632	658	298	7		Preinstalled in cabinet				*	*	*	*	
		MAPW0320C	NEMA 3R	76.0 x 27.7 x 34.0	1930 x 704 x 864	683	310			*	*	*	*					
185 - 220	403	MAPP0403C	OPEN	23.2 x 15.3 x 13.7	589 x 389 x 348	433	196	4	1,816	11.1 x 16.4 x 7.6	282 x 417 x 193	1	1	S	*	*	*	*
		MAPG0403C	NEMA 1/2	76.0 x 27.7 x 24.9	1930 x 704 x 632	635	288	7		Preinstalled in cabinet				*	*	*	*	
		MAPW0403C	NEMA 3R	76.0 x 27.7 x 34.0	1930 x 704 x 864	667	303			*	*	*	*					
-	482	MAPP0482C	OPEN	23.3 x 15.3 x 14.8	592 x 389 x 376	543	246	4	2,008	8.0 x 16.4 x 7.6	203 x 417 x 193	2	1	S	*	*	*	*
		MAPG0482C	NEMA 1/2	87.6 x 43.7 x 31.1	2225 x 1110 x 790	955	433	7		Preinstalled in cabinet				*	*	*	*	
		MAPW0482C	NEMA 3R	87.6 x 43.7 x 40.1	2225 x 1110 x 1019	1,000	454			*	*	*	*					
280	636	MAPP0636C	OPEN	25.8 x 24.0 x 16.5	655 x 610 x 419	683	310	5	2,359	9.9 x 16.4 x 7.6	251 x 417 x 193	2	1	S	*	*	*	*
		MAPG0636C	NEMA 1/2	87.6 x 43.7 x 31.1	2225 x 1110 x 790	1,094	496	7		Preinstalled in cabinet				*	*	*	*	
		MAPW0636C	NEMA 3R	87.6 x 43.7 x 40.1	2225 x 1110 x 1019	1,131	513			*	*	*	*					
375	786	MAPP0786C	OPEN	25.7 x 24.0 x 17.9	653 x 610 x 455	777	352	5	2,604	11.1 x 16.4 x 7.6	282 x 417 x 193	2	1	S	*	*	*	*
		MAPG0786C	NEMA 1/2	87.6 x 43.7 x 31.1	2225 x 1110 x 790	1,183	537	7		Preinstalled in cabinet				*	*	*	*	
		MAPW0786C	NEMA 3R	87.6 x 43.7 x 40.1	2225 x 1110 x 1019	1,228	557			*	*	*	*					
450	850	MAPP0850C	OPEN	25.9 x 24.0 x 20.3	658 x 610 x 516	981	445	5	2,974	9.9 x 16.4 x 7.6	251 x 417 x 193	2	1	S	*	*	*	*
		MAPG0850C	NEMA 1/2	84.0 x 52.0 x 36.5	2134 x 1321 x 927	1,604	728	8.0 x 16.4 x 7.6		203 x 417 x 193	1							
		MAPW0850C	NEMA 3R	84.0 x 52.0 x 45.5	2134 x 1321 x 1156	1,644	746	Preinstalled in cabinet				*	*	*	*			
525	1000	MAPP1000C	OPEN	25.9 x 24.0 x 21.2	658 x 610 x 538	973	441	5	3,954	9.9 x 16.4 x 7.6	251 x 417 x 193	3	1	S	*	*	*	*
		MAPG1000C	NEMA 1/2	84.0 x 52.0 x 36.5	2134 x 1321 x 927	1,579	716	7		Preinstalled in cabinet				*	*	*	*	
		MAPW1000C	NEMA 3R	84.0 x 52.0 x 45.5	2134 x 1321 x 1156	1,620	735			*	*	*	*					
600	1200	MAPP1200C	OPEN	26.0 x 24.0 x 22.2	660 x 610 x 564	989	449	5	4,136	11.1 x 16.4 x 7.6	282 x 417 x 193	3	1	S	*	*	*	*
		MAPG1200C	NEMA 1/2	84.0 x 52.0 x 36.5	2134 x 1321 x 927	1,575	714	7		Preinstalled in cabinet				*	*	*	*	
		MAPW1200C	NEMA 3R	84.0 x 52.0 x 45.5	2134 x 1321 x 1156	1,616	733			*	*	*	*					

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MATRIX® AP SELECTION TABLES

480V 60Hz

Motor (Ref Only)	Filter Amps Rating	MTE Part Number	Enclosure Type	Filter Dimensions (H x W x D)		Approx Weight		Ref Fig	Watts Loss	Capacitor/Capacitor Panel Assembly Dimensions (H x W x D)		Qty Req'd	Ref Fig	Available Options			
				Inches	Millimeters	Lbs	Kgs			Inches	Millimeters			002	009	012	013
3	6	MAPP0006D	OPEN	8.7 x 8.0 x 5.4	221 x 203 x 137	20	9	3	122	7.5 x 3.0	191 x 76	1	2	S	*	*	*
		MAPG0006D	NEMA 1/2	24.0 x 12.5 x 17.9	610 x 318 x 455	66	30	6		Preinstalled in cabinet				S	S	S	S
		MAPW0006D	NEMA 3R	24.0 x 12.5 x 23.0	610 x 318 x 584	74	34			S	S	S	S				
5	8	MAPP0008D	OPEN	8.7 x 8.0 x 5.4	221 x 203 x 137	20	9	3	158	7.5 x 3.0	191 x 76	1	2	S	*	*	*
		MAPG0008D	NEMA 1/2	24.0 x 12.5 x 17.9	610 x 318 x 455	68	31	6		Preinstalled in cabinet				S	S	S	S
		MAPW0008D	NEMA 3R	24.0 x 12.5 x 23.0	610 x 318 x 584	75	34			S	S	S	S				
7.5	11	MAPP0011D	OPEN	9.9 x 9.0 x 4.8	251 x 229 x 122	28	13	3	192	7.5 x 3.0	191 x 76	1	2	S	*	*	*
		MAPG0011D	NEMA 1/2	24.0 x 12.5 x 17.9	610 x 318 x 455	75	34	6		Preinstalled in cabinet				S	S	S	S
		MAPW0011D	NEMA 3R	24.0 x 12.5 x 23.0	610 x 318 x 584	83	38			S	S	S	S				
10	14	MAPP0014D	OPEN	9.8 x 9.0 x 5.3	249 x 229 x 135	33	15	3	220	7.5 x 3.0	191 x 76	1	2	S	*	*	*
		MAPG0014D	NEMA 1/2	24.0 x 12.5 x 17.9	610 x 318 x 455	80	36	6		Preinstalled in cabinet				S	S	S	S
		MAPW0014D	NEMA 3R	24.0 x 12.5 x 23.0	610 x 318 x 584	88	40			S	S	S	S				
15	21	MAPP0021D	OPEN	11.7 x 10.5 x 6.6	297 x 267 x 168	50	23	3	251	8.0 x 3.9	203 x 99	1	2	S	*	*	*
		MAPG0021D	NEMA 1/2	24.0 x 12.5 x 17.9	610 x 318 x 455	98	44	6		Preinstalled in cabinet				S	S	S	S
		MAPW0021D	NEMA 3R	24.0 x 12.5 x 23.0	610 x 318 x 584	107	49			S	S	S	S				
20	27	MAPP0027D	OPEN	11.8 x 10.5 x 7.2	300 x 267 x 183	56	25	3	283	8.0 x 3.9	203 x 99	1	2	S	*	*	*
		MAPG0027D	NEMA 1/2	24.0 x 12.5 x 17.9	610 x 318 x 455	104	47	6		Preinstalled in cabinet				S	S	S	S
		MAPW0027D	NEMA 3R	24.0 x 12.5 x 23.0	610 x 318 x 584	112	51			S	S	S	S				
25	34	MAPP0034D	OPEN	11.7 x 10.5 x 7.7	297 x 267 x 196	67	30	3	318	8.0 x 3.9	203 x 99	1	2	S	*	*	*
		MAPG0034D	NEMA 1/2	24.0 x 12.5 x 17.9	610 x 318 x 455	113	51	6		Preinstalled in cabinet				S	S	S	S
		MAPW0034D	NEMA 3R	24.0 x 12.5 x 23.0	610 x 318 x 584	122	55			S	S	S	S				
30	44	MAPP0044D	OPEN	11.7 x 10.5 x 8.2	297 x 267 x 208	78	35	3	379	8.3 x 4.6	211 x 117	1	2	S	*	*	*
		MAPG0044D	NEMA 1/2	24.0 x 12.5 x 17.9	610 x 318 x 455	128	58	6		Preinstalled in cabinet				S	S	S	S
		MAPW0044D	NEMA 3R	24.0 x 12.5 x 23.0	610 x 318 x 584	133	60			S	S	S	S				
40	52	MAPP0052D	OPEN	14.0 x 12.0 x 9.1	356 x 305 x 231	99	45	4	413	9.2 x 4.6	234 x 117	1	2	S	*	*	*
		MAPG0052D	NEMA 1/2	33.9 x 18.3 x 20.9	861 x 465 x 531	173	78	7		Preinstalled in cabinet				S	S	S	S
		MAPW0052D	NEMA 3R	33.9 x 18.3 x 26.0	861 x 465 x 660	181	82			S	S	S	S				
50	66	MAPP0066D	OPEN	14.0 x 12.0 x 9.0	356 x 305 x 229	111	50	4	488	9.2 x 4.6	234 x 117	1	2	S	*	*	*
		MAPG0066D	NEMA 1/2	33.9 x 18.3 x 20.9	861 x 465 x 531	185	84	7		Preinstalled in cabinet				S	S	S	S
		MAPW0066D	NEMA 3R	33.9 x 18.3 x 26.0	861 x 465 x 660	193	88			S	S	S	S				
60	83	MAPP0083D	OPEN	14.0 x 12.0 x 10.9	356 x 305 x 277	139	63	4	600	10.6 x 4.6	269 x 117	1	2	S	*	*	*
		MAPG0083D	NEMA 1/2	33.9 x 18.3 x 20.9	861 x 465 x 531	209	95	7		Preinstalled in cabinet				S	S	S	S
		MAPW0083D	NEMA 3R	33.9 x 18.3 x 26.0	861 x 465 x 660	217	98			S	S	S	S				
75	103	MAPP0103D	OPEN	14.1 x 12.0 x 11.0	358 x 305 x 279	147	67	4	702	10.6 x 4.6	269 x 117	1	2	S	*	*	*
		MAPG0103D	NEMA 1/2	33.9 x 18.3 x 20.9	861 x 465 x 531	221	100	7		Preinstalled in cabinet				S	S	S	S
		MAPW0103D	NEMA 3R	33.9 x 18.3 x 26.0	861 x 465 x 660	228	103			S	S	S	S				
100	128	MAPP0128D	OPEN	20.0 x 15.3 x 10.7	508 x 389 x 272	195	88	4	1,035	6.9 x 16.3 x 7.6	175 x 414 x 193	1	1	S	*	*	*
		MAPG0128D	NEMA 1/2	51.3 x 27.7 x 24.9	1303 x 704 x 632	360	163	7		Preinstalled in cabinet				S	S	S	S
		MAPW0128D	NEMA 3R	51.3 x 27.7 x 30.0	1303 x 704 x 762	373	169			S	S	S	S				

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480V 60Hz

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				Inches	Millimeters	Lbs	Kgs			Inches	Millimeters			002	009	012	013
125	165	MAPP0165D	OPEN	20.0 x 15.3 x 11.7	508 x 389 x 297	233	106	4	1,096	6.7 x 16.4 x 7.6	170 x 417 x 193	1	1	S	*	*	*
		MAPG0165D	NEMA 1/2	51.3 x 27.7 x 24.9	1303 x 704 x 632	435	197	7		Preinstalled in cabinet				S	S	S	S
		MAPW0165D	NEMA 3R	51.3 x 27.7 x 30.0	1303 x 704 x 762	448	203			S	S	S	S				
150	208	MAPP0208D	OPEN	20.1 x 15.3 x 11.8	511 x 389 x 300	287	130	4	1,343	6.7 x 16.4 x 7.6	170 x 417 x 193	1	1	S	*	*	*
		MAPG0208D	NEMA 1/2	51.3 x 27.7 x 24.9	1303 x 704 x 632	452	205	7		Preinstalled in cabinet				S	S	S	S
		MAPW0208D	NEMA 3R	51.3 x 27.7 x 30.0	1303 x 704 x 762	464	210			S	S	S	S				
200	240	MAPP0240D	OPEN	20.0 x 15.3 x 12.7	508 x 389 x 323	323	147	4	1,514	6.7 x 16.4 x 7.6	170 x 417 x 193	1	1	S	*	*	*
		MAPG0240D	NEMA 1/2	51.3 x 27.7 x 24.9	1303 x 704 x 632	488	221	7		Preinstalled in cabinet				S	S	S	S
		MAPW0240D	NEMA 3R	51.3 x 27.7 x 30.0	1303 x 704 x 762	501	227			S	S	S	S				
250	320	MAPP0320D	OPEN	20.0 x 15.3 x 14.8	508 x 389 x 376	416	189	4	1,543	8.0 x 16.4 x 7.6	203 x 417 x 193	1	1	S	*	*	*
		MAPG0320D	NEMA 1/2	76.0 x 27.7 x 24.9	1930 x 704 x 632	654	297	7		Preinstalled in cabinet				S	S	S	*
		MAPW0320D	NEMA 3R	76.0 x 27.7 x 34.0	1930 x 704 x 864	679	308			S	S	S	*				
300	403	MAPP0403D	OPEN	23.3 x 15.3 x 13.7	592 x 389 x 348	419	190	4	1,932	9.9 x 16.4 x 7.6	251 x 417 x 193	1	1	S	*	*	*
		MAPG0403D	NEMA 1/2	76.0 x 27.7 x 24.9	1930 x 704 x 632	649	294	7		Preinstalled in cabinet				S	S	S	*
		MAPW0403D	NEMA 3R	76.0 x 27.7 x 34.0	1930 x 704 x 864	674	306			S	S	S	*				
400	482	MAPP0482D	OPEN	23.3 x 15.3 x 14.8	592 x 389 x 376	532	241	4	2,137	6.7 x 16.4 x 7.6	170 x 417 x 193	2	1	S	*	*	*
		MAPG0482D	NEMA 1/2	87.6 x 43.7 x 31.1	2225 x 1110 x 790	944	428	7		Preinstalled in cabinet				S	S	S	*
		MAPW0482D	NEMA 3R	87.6 x 43.7 x 40.1	2225 x 1110 x 1019	981	445			S	S	S	*				
500	636	MAPP0636D	OPEN	25.8 x 24.0 x 16.5	655 x 610 x 419	667	303	5	2,509	8.0 x 16.4 x 7.6	203 x 417 x 193	2	1	S	*	*	*
		MAPG0636D	NEMA 1/2	87.6 x 43.7 x 31.1	2225 x 1110 x 790	1,085	492	7		Preinstalled in cabinet				S	S	S	*
		MAPW0636D	NEMA 3R	87.6 x 43.7 x 40.1	2225 x 1110 x 1019	1,122	509			S	S	S	*				
600	786	MAPP0786D	OPEN	25.7 x 24.0 x 17.9	653 x 610 x 455	773	351	5	2,771	9.9 x 16.4 x 7.6	251 x 417 x 193	2	1	S	*	*	*
		MAPG0786D	NEMA 1/2	87.6 x 43.7 x 31.1	2225 x 1110 x 790	1,180	535	7		Preinstalled in cabinet				S	S	S	*
		MAPW0786D	NEMA 3R	87.6 x 43.7 x 40.1	2225 x 1110 x 1019	1,225	556			S	S	S	*				
700	850	MAPP0850D	OPEN	25.9 x 24.0 x 20.3	658 x 610 x 516	967	439	5	3,163	8.0 x 16.4 x 7.6	203 x 417 x 193	2	1	S	*	*	*
		MAPP0850D	OPEN	25.9 x 24.0 x 20.3	658 x 610 x 516	967	439	5		6.7 x 16.4 x 7.6	170 x 417 x 193	1		S	*	*	*
		MAPG0850D	NEMA 1/2	84.0 x 52.0 x 36.5	2134 x 1321 x 927	1,590	721	7		Preinstalled in cabinet				S	S	S	*
MAPW0850D	NEMA 3R	84.0 x 52.0 x 45.5	2134 x 1321 x 1156	1,630	739	S	S		S	*							
900	1000	MAPP1000D	OPEN	25.9 x 24.0 x 21.2	658 x 610 x 538	946	429	5	4,206	8.0 x 16.4 x 7.6	203 x 417 x 193	2	1	S	*	*	*
		MAPP1000D	OPEN	25.9 x 24.0 x 21.2	658 x 610 x 538	946	429	5		9.9 x 16.4 x 7.6	251 x 417 x 193	1		S	*	*	*
		MAPG1000D	NEMA 1/2	84.0 x 52.0 x 36.5	2134 x 1321 x 927	1,566	710	7		Preinstalled in cabinet				S	S	S	*
MAPW1000D	NEMA 3R	84.0 x 52.0 x 45.5	2134 x 1321 x 1156	1,607	729	S	S		S	*							
1000	1200	MAPP1200D	OPEN	26.0 x 24.0 x 22.2	660 x 610 x 564	983	446	5	4,400	9.9 x 16.4 x 7.6	251 x 417 x 193	3	1	S	*	*	*
		MAPG1200D	NEMA 1/2	84.0 x 52.0 x 36.5	2134 x 1321 x 927	1,571	713	7		Preinstalled in cabinet				S	S	S	*
		MAPW1200D	NEMA 3R	84.0 x 52.0 x 45.5	2134 x 1321 x 1156	1,612	731			S	S	S	*				
1300	1600	MAPP1600D	OPEN	33.4 x 36.0 x 29.3	848 x 914 x 744	2,272	1031	5	4,500	9.9 x 16.4 x 7.6	251 x 417 x 193	4	1	*	*	*	*
1500	2000	MAPP2000D	OPEN	33.6 x 36.0 x 31.3	853 x 914 x 795	2,678	1215	5	5,050	9.9 x 16.4 x 7.6	251 x 417 x 193	5	1	*	*	*	*
1850	2300	MAPP2300D	OPEN	33.4 x 36.0 x 32.4	848 x 914 x 823	2,885	1309	5	6,100	9.9 x 16.4 x 7.6	251 x 417 x 193	6	1	*	*	*	*

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600V 60Hz

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				Inches	Millimeters	Lbs	Kgs			Inches	Millimeters			002	009	012	013
5	6	MAPP0006E	OPEN	8.7 x 8.0 x 5.4	221 x 203 x 137	18	8	6	150	7.5 x 3.0	191 x 76	1	2	S	*	*	*
		MAPG0006E	NEMA 1/2	24.0 x 12.5 x 17.9	610 x 318 x 455	67	30			Preinstalled in cabinet				S	*	S	*
		MAPW0006E	NEMA 3R	24.0 x 12.5 x 23.0	610 x 318 x 584	75	34			Preinstalled in cabinet				S	*	S	*
5	8	MAPP0008E	OPEN	9.8 x 9.0 x 4.8	249 x 229 x 122	28	13	6	183	7.5 x 3.0	191 x 76	1	2	S	*	*	*
		MAPG0008E	NEMA 1/2	24.0 x 12.5 x 17.9	610 x 318 x 455	75	34			Preinstalled in cabinet				S	*	S	*
		MAPW0008E	NEMA 3R	24.0 x 12.5 x 23.0	610 x 318 x 584	83	38			Preinstalled in cabinet				S	*	S	*
10	11	MAPP0011E	OPEN	9.8 x 9.0 x 5.3	249 x 229 x 135	32	15	6	205	7.5 x 3.0	191 x 76	1	2	S	*	*	*
		MAPG0011E	NEMA 1/2	24.0 x 12.5 x 17.9	610 x 318 x 455	79	36			Preinstalled in cabinet				S	*	S	*
		MAPW0011E	NEMA 3R	24.0 x 12.5 x 23.0	610 x 318 x 584	87	39			Preinstalled in cabinet				S	*	S	*
10	14	MAPP0014E	OPEN	11.7 x 10.5 x 6.7	297 x 267 x 170	47	21	6	250	9.2 x 4.6	234 x 117	1	2	S	*	*	*
		MAPG0014E	NEMA 1/2	24.0 x 12.5 x 17.9	610 x 318 x 455	94	43			Preinstalled in cabinet				S	*	S	*
		MAPW0014E	NEMA 3R	24.0 x 12.5 x 23.0	610 x 318 x 584	102	46			Preinstalled in cabinet				S	*	S	*
15	21	MAPP0021E	OPEN	11.7 x 10.5 x 7.2	297 x 267 x 183	58	26	6	285	7.5 x 3.9	191 x 99	1	2	S	*	*	*
		MAPG0021E	NEMA 1/2	24.0 x 12.5 x 17.9	610 x 318 x 455	106	48			Preinstalled in cabinet				S	*	S	*
		MAPW0021E	NEMA 3R	24.0 x 12.5 x 23.0	610 x 318 x 584	113	51			Preinstalled in cabinet				S	*	S	*
25	27	MAPP0027E	OPEN	11.7 x 10.5 x 7.7	297 x 267 x 196	68	31	6	304	8.3 x 4.6	211 x 117	1	2	S	*	*	*
		MAPG0027E	NEMA 1/2	24.0 x 12.5 x 17.9	610 x 318 x 455	115	52			Preinstalled in cabinet				S	*	S	*
		MAPW0027E	NEMA 3R	24.0 x 12.5 x 23.0	610 x 318 x 584	123	56			Preinstalled in cabinet				S	*	S	*
30	34	MAPP0034E	OPEN	11.7 x 10.5 x 8.2	297 x 267 x 208	89	40	6	366	8.3 x 4.6	211 x 117	1	2	S	*	*	*
		MAPG0034E	NEMA 1/2	24.0 x 12.5 x 17.9	610 x 318 x 455	124	56			Preinstalled in cabinet				S	*	S	*
		MAPW0034E	NEMA 3R	24.0 x 12.5 x 23.0	610 x 318 x 584	131	59			Preinstalled in cabinet				S	*	S	*
40	44	MAPP0044E	OPEN	14.0 x 12.0 x 9.9	356 x 305 x 251	118	54	7	395	9.2 x 4.6	234 x 117	1	2	S	*	*	*
		MAPG0044E	NEMA 1/2	33.9 x 18.3 x 20.9	861 x 465 x 531	192	87			Preinstalled in cabinet				S	*	S	*
		MAPW0044E	NEMA 3R	33.9 x 18.3 x 26.0	861 x 465 x 660	199	90			Preinstalled in cabinet				S	*	S	*
50	52	MAPP0052E	OPEN	14.1 x 12.0 x 10.3	358 x 305 x 262	142	64	7	494	9.2 x 4.6	234 x 117	1	2	S	*	*	*
		MAPG0052E	NEMA 1/2	33.9 x 18.3 x 20.9	861 x 465 x 531	197	89			Preinstalled in cabinet				S	*	S	*
		MAPW0052E	NEMA 3R	33.9 x 18.3 x 26.0	861 x 465 x 660	204	93			Preinstalled in cabinet				S	*	S	*
60	66	MAPP0066E	OPEN	14.0 x 12.0 x 11.0	356 x 305 x 279	166	75	7	655	10.6 x 4.6	269 x 117	1	2	S	*	*	*
		MAPG0066E	NEMA 1/2	33.9 x 18.3 x 20.9	861 x 465 x 531	209	95			Preinstalled in cabinet				S	*	S	*
		MAPW0066E	NEMA 3R	33.9 x 18.3 x 26.0	861 x 465 x 660	217	98			Preinstalled in cabinet				S	*	S	*
75	83	MAPP0083E	OPEN	14.1 x 12.0 x 10.9	358 x 305 x 277	144	65	7	718	10.6 x 4.6	269 x 117	1	2	S	*	*	*
		MAPG0083E	NEMA 1/2	33.9 x 18.3 x 20.9	861 x 465 x 531	218	99			Preinstalled in cabinet				S	*	S	*
		MAPW0083E	NEMA 3R	33.9 x 18.3 x 26.0	861 x 465 x 660	226	103			Preinstalled in cabinet				S	*	S	*

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HP				Inches	Millimeters	Lbs	Kgs			Inches	Millimeters			002	009	012	013
100	103	MAPP0103E	OPEN	20.0 x 15.3 x 10.7	508 x 389 x 272	210	95	4	1,085	6.7 x 16.4 x 7.6	170 x 417 x 193	1	1	S	*	*	*
		MAPG0103E	NEMA 1/2	51.3 x 27.7 x 24.9	1303 x 704 x 632	376	171	7		Preinstalled in cabinet				S	*	S	*
		MAPW0103E	NEMA 3R	51.3 x 27.7 x 30.0	1303 x 704 x 762	389	176							S	*	S	*
125	128	MAPP0128E	OPEN	20.0 x 15.3 x 11.7	508 x 389 x 297	270	122	4	1,090	6.7 x 16.4 x 7.6	170 x 417 x 193	1	1	S	*	*	*
		MAPG0128E	NEMA 1/2	51.3 x 27.7 x 24.9	1303 x 704 x 632	436	198	7		Preinstalled in cabinet				S	*	S	*
		MAPW0128E	NEMA 3R	51.3 x 27.7 x 30.0	1303 x 704 x 762	449	204							S	*	S	*
150	165	MAPP0165E	OPEN	20.1 x 15.3 x 11.9	511 x 389 x 302	287	130	4	1,285	6.7 x 16.4 x 7.6	170 x 417 x 193	1	1	S	*	*	*
		MAPG0165E	NEMA 1/2	51.3 x 27.7 x 24.9	1303 x 704 x 632	456	207	7		Preinstalled in cabinet				S	*	S	*
		MAPW0165E	NEMA 3R	51.3 x 27.7 x 30.0	1303 x 704 x 762	469	213							S	*	S	*
200	208	MAPP0208E	OPEN	20.1 x 15.3 x 12.8	511 x 389 x 325	322	146	4	1,431	7.7 x 16.4 x 7.6	196 x 417 x 193	1	1	S	*	*	*
		MAPG0208E	NEMA 1/2	51.3 x 27.7 x 24.9	1303 x 704 x 632	482	219	7		Preinstalled in cabinet				S	*	S	*
		MAPW0208E	NEMA 3R	51.3 x 27.7 x 30.0	1303 x 704 x 762	516	234							S	*	S	*
250	240	MAPP0240E	OPEN	19.9 x 15.3 x 15.8	505 x 389 x 401	427	194	4	1,624	7.7 x 16.4 x 7.6	196 x 417 x 193	1	1	S	*	*	*
		MAPG0240E	NEMA 1/2	76.0 x 27.7 x 24.9	1930 x 704 x 632	661	300	7		Preinstalled in cabinet				S	*	S	*
		MAPW0240E	NEMA 3R	76.0 x 27.7 x 34.0	1930 x 704 x 864	687	312							S	*	S	*
300	320	MAPP0320E	OPEN	23.2 x 15.3 x 15.7	589 x 389 x 399	501	227	4	2,021	9.2 x 16.4 x 7.6	234 x 417 x 193	1	1	S	*	*	*
		MAPG0320E	NEMA 1/2	76.0 x 27.7 x 24.9	1930 x 704 x 632	740	336	7		Preinstalled in cabinet				S	*	S	*
		MAPW0320E	NEMA 3R	76.0 x 27.7 x 34.0	1930 x 704 x 864	765	347							S	*	S	*
400	403	MAPP0403E	OPEN	23.3 x 15.3 x 15.8	592 x 389 x 401	504	229	4	2,208	12.1 x 16.4 x 7.6	307 x 417 x 193	1	1	S	*	*	*
		MAPG0403E	NEMA 1/2	87.6 x 43.7 x 31.1	2225 x 1110 x 790	909	412	7		Preinstalled in cabinet				S	*	S	*
		MAPW0403E	NEMA 3R	87.6 x 43.7 x 40.1	2225 x 1110 x 1019	945	429							S	*	S	*
500	482	MAPP0482E	OPEN	25.9 x 24.0 x 16.6	658 x 610 x 422	670	304	5	2,481	7.7 x 16.4 x 7.6	196 x 417 x 193	2	1	S	*	*	*
		MAPG0482E	NEMA 1/2	87.6 x 43.7 x 31.1	2225 x 1110 x 790	1,091	495	7		Preinstalled in cabinet				S	*	S	*
		MAPW0482E	NEMA 3R	87.6 x 43.7 x 40.1	2225 x 1110 x 1019	1,136	515							S	*	S	*
600	636	MAPP0636E	OPEN	25.9 x 24.0 x 17.7	658 x 610 x 450	754	342	5	2,884	9.2 x 16.4 x 7.6	234 x 417 x 193	2	1	S	*	*	*
		MAPG0636E	NEMA 1/2	87.6 x 43.7 x 31.1	2225 x 1110 x 790	1,227	557	7		Preinstalled in cabinet				S	*	S	*
		MAPW0636E	NEMA 3R	87.6 x 43.7 x 40.1	2225 x 1110 x 1019	1,264	573							S	*	S	*
800	786	MAPP0786E	OPEN	26.0 x 24.0 x 19.5	660 x 610 x 495	927	420	5	3,368	12.1 x 16.4 x 7.6	307 x 417 x 193	2	1	S	*	*	*
		MAPG0786E	NEMA 1/2	84.0 x 52.0 x 36.5	2134 x 1321 x 927	1,509	684	7		Preinstalled in cabinet				S	*	S	*
		MAPW0786E	NEMA 3R	84.0 x 52.0 x 45.5	2134 x 1321 x 1156	1,549	703							S	*	S	*

Note: Weights and dimensions are for reference only. Please visit mtecorp.com for detailed information.

S = Standard stock offering

* = Call for availability

MATRIX® AP SELECTION TABLES

690V 50Hz

Motor (Ref Only)	Filter Amps Rating	MTE Part Number	Enclosure Type	Filter Dimensions (H x W x D)		Approx Weight		Ref Fig	Watts Loss	Capacitor/Capacitor Panel Assembly Dimensions (H x W x D)		Qty Req'd	Ref Fig	Available Options			
				Inches	Millimeters	Lbs	Kgs			Inches	Millimeters			002	009	012	013
37	52	MAPP0052F	OPEN	19.8 x 15.3 x 11.1	503 x 389 x 282	167	76	3	681	6.7 x 16.4 x 7.6	170 x 417 x 193	1	1	*	*	*	*
45	66	MAPP0066F	OPEN	19.9 x 15.3 x 11.2	505 x 389 x 284	193	88	3	844	7.7 x 16.4 x 7.6	196 x 417 x 193	1	1	*	*	*	*
55	83	MAPP0083F	OPEN	19.9 x 15.3 x 11.6	505 x 389 x 295	254	115	3	850	6.7 x 16.4 x 7.6	170 x 417 x 193	1	1	*	*	*	*
75	103	MAPP0103F	OPEN	20.1 x 15.3 x 11.7	511 x 389 x 297	242	110	3	1,051	9.2 x 16.4 x 7.6	234 x 417 x 193	1	1	*	*	*	*
90	128	MAPP0128F	OPEN	19.9 x 15.3 x 12.7	505 x 389 x 323	323	147	3	1,106	8.0 x 16.4 x 7.6	203 x 417 x 193	1	1	*	*	*	*
110	165	MAPP0165F	OPEN	19.9 x 15.3 x 14.8	505 x 389 x 376	378	171	3	1,257	10.7 x 16.3 x 7.6	272 x 414 x 193	1	1	*	*	*	*
150	208	MAPP0208F	OPEN	23.1 x 15.3 x 13.7	587 x 389 x 348	448	203	3	1,400	6.7 x 16.4 x 7.6	170 x 417 x 193	1	1	*	*	*	*
										7.7 x 16.4 x 7.6	196 x 417 x 193	1		*	*	*	*
185	240	MAPP0240F	OPEN	23.2 x 15.3 x 14.9	589 x 389 x 378	503	228	3	1,721	7.7 x 16.4 x 7.6	196 x 417 x 193	1	1	*	*	*	*
										8.0 x 16.4 x 7.6	203 x 417 x 193	1		*	*	*	*
222	320	MAPP0320F	OPEN	25.9 x 24.0 x 16.7	658 x 610 x 424	912	414	4	2,031	9.9 x 16.4 x 7.6	251 x 417 x 193	2	1	*	*	*	*
280	403	MAPP0403F	OPEN	25.8 x 24.0 x 17.8	655 x 610 x 452	982	445	4	2,780	6.7 x 16.4 x 7.6	170 x 417 x 193	1	1	*	*	*	*
										9.9 x 16.4 x 7.6	251 x 417 x 193	2		*	*	*	*
375	482	MAPP0482F	OPEN	25.9 x 24.0 x 19.0	658 x 610 x 483	1,167	529	4	2,883	9.9 x 16.4 x 7.6	251 x 417 x 193	3	1	*	*	*	*
450	636	MAPP0636F	OPEN	25.9 x 24.0 x 21.6	658 x 610 x 549	1,084	492	4	3,140	11.1 x 16.4 x 7.6	282 x 417 x 193	3	1	*	*	*	*

Notes: Weights and dimensions are for reference only. Please visit mtecorp.com for detailed information.

S = Standard stock offering

* = Call for availability

CAPACITOR/CAPACITOR PANEL

FIGURE 1

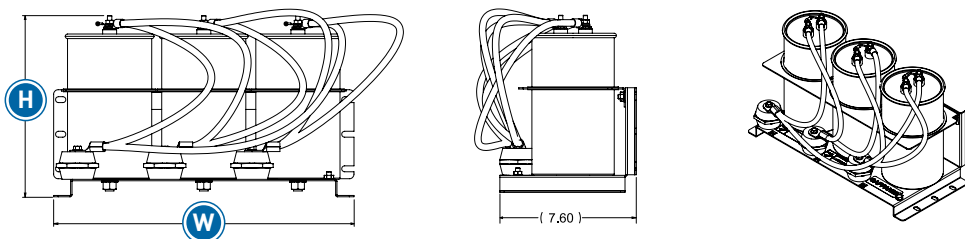
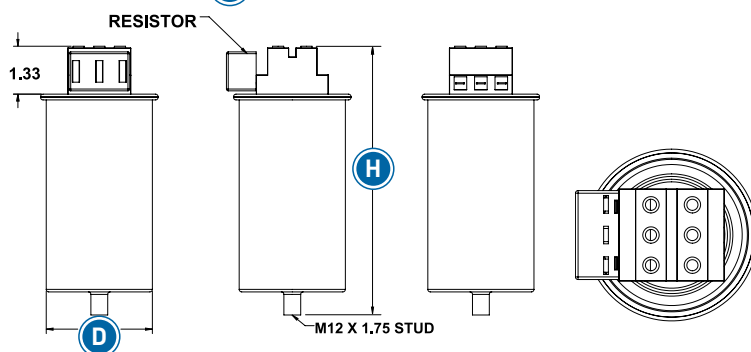


FIGURE 2



OPEN MAGNETICS

FIGURE 3

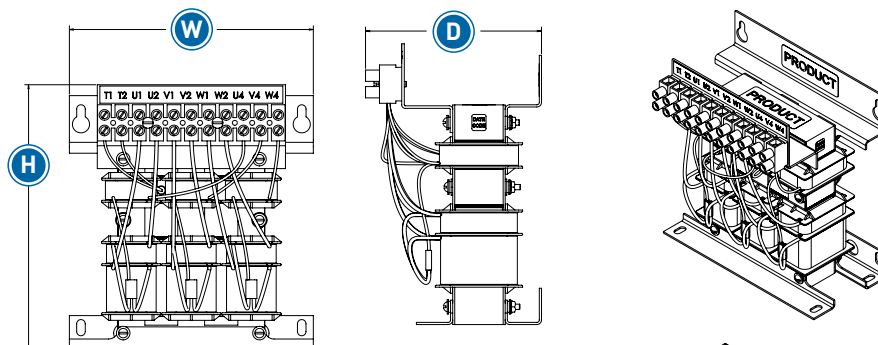


FIGURE 4

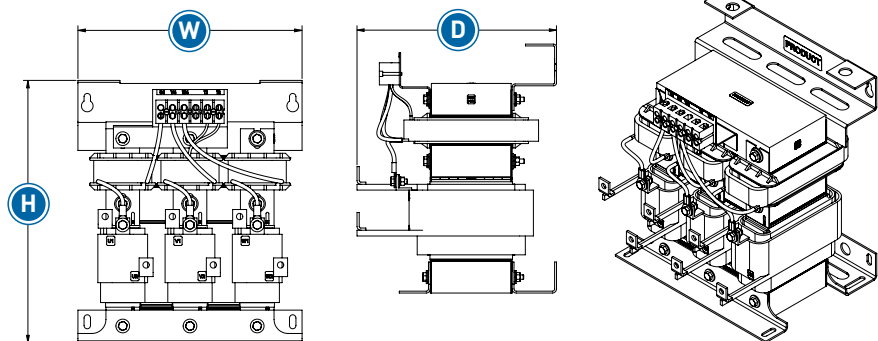
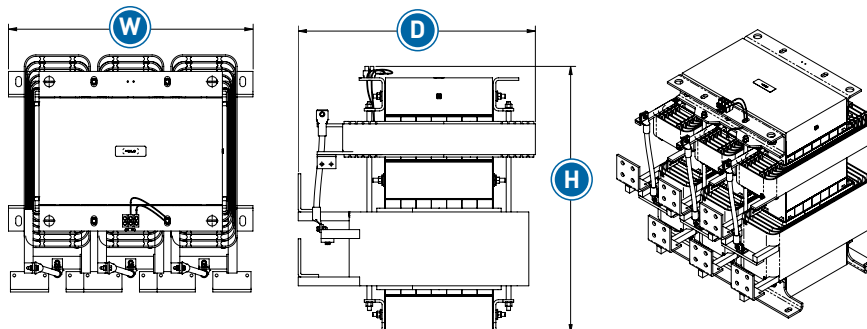


FIGURE 5



ENCLOSURES

(NOTE: HOODS ONLY ON NEMA 3R ENCLOSURES)

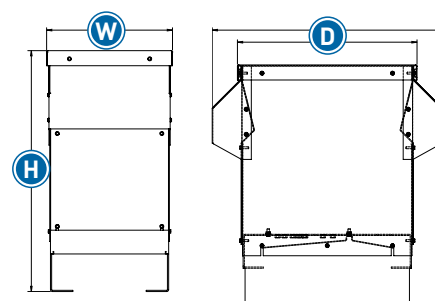


FIGURE 6

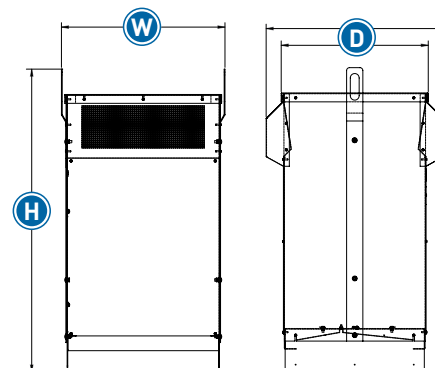
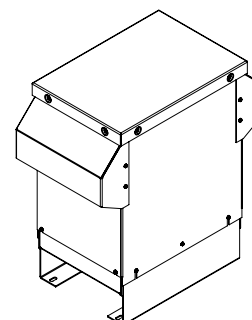
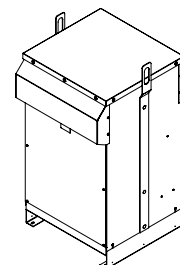


FIGURE 7





Harmonic Filters

Matrix® AP

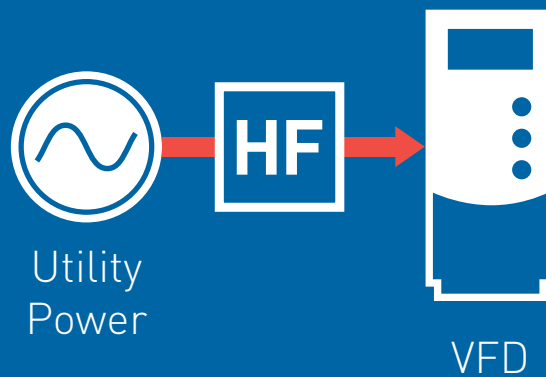
Adaptive Passive Technology for superior harmonic mitigation at varying loads

Matrix® APAX

Quality, convenient solutions for reducing harmonic distortion

Single Phase Matrix® ONE

Optimized harmonic filters with proven harmonic mitigation



Harmonic Filters **Matrix® APAX** Product Selector



- **Compact passive harmonic filter**
- **Meets 10%-15% harmonic distortion requirements**
- **Over temperature switch included**
- **Easy to integrate and install**
- **Designed in the USA**

Power quality just got easier to achieve.

The patented Matrix® APAX is the convenient solution for meeting specific harmonic distortion requirements. Designed in the USA and built to meet MTE's proven standards for quality, the Matrix® APAX helps reduce harmonic distortions caused by Variable Frequency Drives (VFDs).

It features a one-panel design with fewer connections and optional contactor positions. This makes it easier to integrate and easier to install. With Matrix® APAX Harmonic Filters, power quality, energy efficiency and reduced downtime are easy to afford.

The convenient, easy-to-install solution for harmonic filtering.

The Matrix® APAX Harmonic Filter can be specified for use on the input of your VFD or other 6-pulse rectifier power supply to meet the 10%-15% requirement for harmonic distortion.

Improves system efficiency and reliability

Helps extend service

Alleviates system downtime

Performance Specifications

Service Load Condition	Load: 6-pulse rectifier only
Input Voltage	380V - 415V +/- 10%; 50 + 0.75Hz; 3-phase
Maximum THID	With DC link: 12% @ 40% load; 8% @ full load Without DC link: 17% @ 40% load; 12% @ full load
Maximum Ambient Temperature	-40C to +50C open panel filters -40C to +90C storage
Insertion Loss @ Full Load	<5%
Efficiency	>98%
Altitude Without Derating	3,300 feet above sea level
Relative Humidity	0% to 95% non-condensing
Current Rating	150% for 1 minute duration
Fan Life Expectancy	80,000 hours @ 40C

Final product specifications subject to change at anytime.

How to properly size your filter

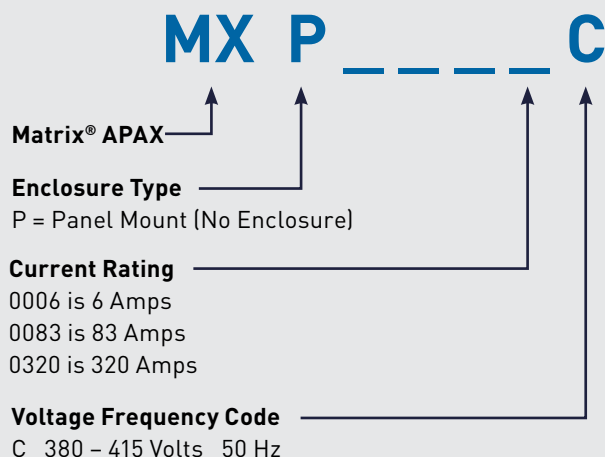
- **Determine voltage and frequency required**
- **Reference motor nameplate to determine motor HP or KW and Full Load Amps**
- **Select filter based on Motor Full Load Amps**
Do not exceed filter's maximum current rating (amps)
- **Determine derating requirements**
Reference Performance Specifications table on previous page

Matrix® APAX Options

Contactor Wiring Option: Opens capacitors under light load conditions

- User configurable wiring block
- See image below
- Allows for user to disconnect option to meet their application
- Shipped with factory installed jumpers that must be removed for installation of contactor option

Understanding the Matrix® APAX Part Number:



Matrix® APAX Harmonic Filter comes standard with field installable contactor options.

385 - 415V 50Hz

Motor (Ref Only)	Filter Amps Rating	MTE Part Number	Enclosure Type	Filter Dimensions (H x W x D)		Approx Weight		Ref Fig	Watts Loss	Capacitor/Capacitor Panel Assembly Dimensions (H x W x D)	
				Inches	Millimeters	Lbs	Kgs			Inches	Millimeters
1.1 - 2.2	6	MXP0006C	OPEN	12.6 x 7.4 x 8.9	320 x 188 x 226	20	9	1	65	Preinstalled on reactor panel	
-	8	MXP0008C	OPEN	12.6 x 7.4 x 8.9	320 x 188 x 226	24	11	1	74	Preinstalled on reactor panel	
3.7	11	MXP0011C	OPEN	12.6 x 7.4 x 9.1	320 x 188 x 231	30	14	1	94	Preinstalled on reactor panel	
5.5	14	MXP0014C	OPEN	12.6 x 7.4 x 9.3	320 x 188 x 236	33	15	1	106	Preinstalled on reactor panel	
7.5	21	MXP0021C	OPEN	17.4 x 7.6 x 11.4	442 x 193 x 290	39	18	2	192	Preinstalled on reactor panel	
11	27	MXP0027C	OPEN	17.4 x 7.6 x 11.4	442 x 193 x 290	43	20	2	212	Preinstalled on reactor panel	
15	34	MXP0034C	OPEN	17.4 x 7.6 x 11.4	442 x 193 x 290	47	21	2	205	Preinstalled on reactor panel	
18.5 - 22	44	MXP0044C	OPEN	17.4 x 7.6 x 11.4	442 x 193 x 290	53	24	2	270	Preinstalled on reactor panel	
-	52	MXP0052C	OPEN	20.0 x 10.6 x 12.5	508 x 269 x 318	73	33	3	278	Preinstalled on reactor panel	
30	66	MXP0066C	OPEN	20.0 x 10.6 x 12.2	508 x 269 x 310	78	35	3	359	Preinstalled on reactor panel	
37 - 45	83	MXP0083C	OPEN	20.0 x 10.6 x 13.1	508 x 269 x 333	92	42	3	378	Preinstalled on reactor panel	
55	103	MXP0103C	OPEN	20.0 x 10.6 x 13.8	508 x 269 x 351	104	47	3	397	Preinstalled on reactor panel	
-	128	MXP0128C	OPEN	20.2 x 10.6 x 14.3	513 x 269 x 363	115	52	3	480	Preinstalled on reactor panel	
75 - 90	165	MXP0165C	OPEN	25.5 x 14.8 x 14.3	648 x 376 x 363	145	66	4	668	Preinstalled on reactor panel	
110	208	MXP0208C	OPEN	25.6 x 14.8 x 14.6	650 x 376 x 371	163	74	4	732	Preinstalled on reactor panel	
-	240	MXP0240C	OPEN	25.6 x 14.8 x 15.7	650 x 376 x 399	193	88	4	768	Preinstalled on reactor panel	
150	320	MXP0320C	OPEN	25.8 x 14.8 x 15.6	655 x 376 x 396	209	95	4	929	Preinstalled on reactor panel	

Note: Weights and dimensions are for reference only. Please visit mtecorp.com for detailed information.

OPEN MAGNETICS

FIGURE 1

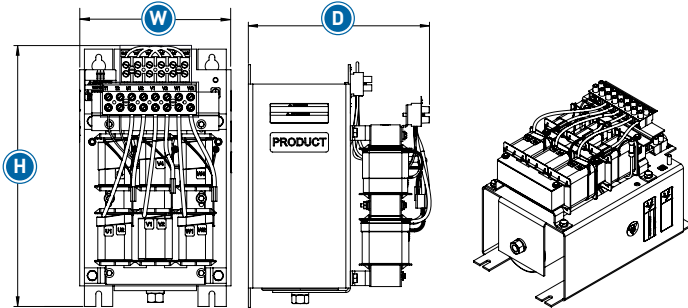


FIGURE 2

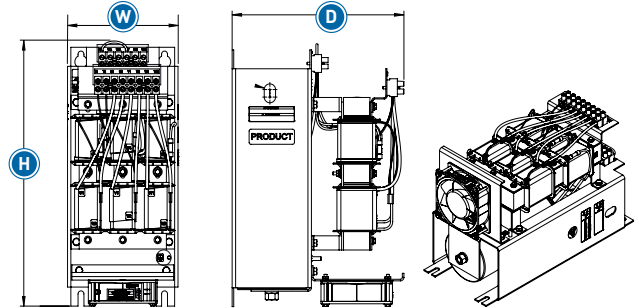


FIGURE 3

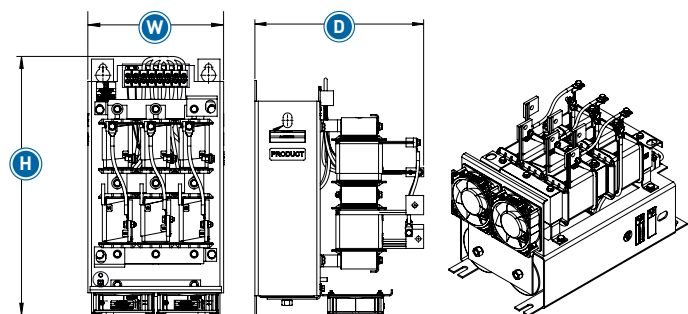
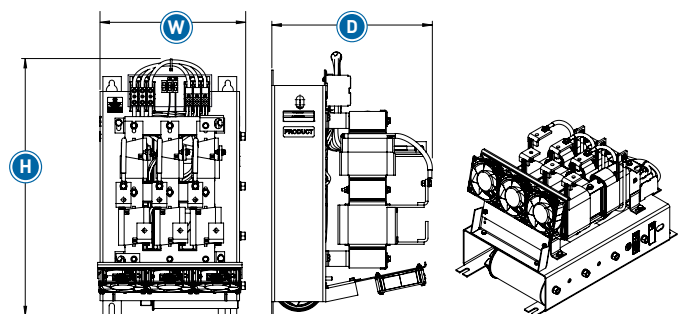


FIGURE 4



Note: Figure illustrations are for reference only. Actual hardware may differ. Please visit mtecorp.com for detailed information.



Harmonic Filters

Matrix® AP

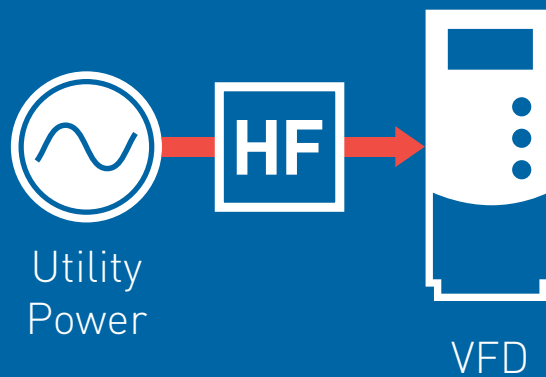
Adaptive Passive Technology for superior harmonic mitigation at varying loads

Matrix® APAX

Quality, convenient solutions for reducing harmonic distortion

Single Phase Matrix® ONE

Optimized harmonic filters with proven harmonic mitigation



Single Phase **Matrix® ONE** Product Selector



- **Extends the service life of electrical equipment**
- **Reduces system downtime**
- **Easy to install and maintain**
- **Increases energy efficiency**
- **Three-year warranty**

Power quality you can count on.

The Single Phase Matrix® ONE Filter provides reliable harmonic protection in environments where utility power may not be optimal. MTE has built the Single Phase Matrix® ONE Filter with time-tested components to work in rural, remote areas where three phase power is often not available. Its patented technology reduces harmonic distortion allowing your equipment to run with increased energy efficiency and better overall THID performance.

The Matrix® ONE is designed to generate less heat and reduce system downtime. Easy to install and maintain, the Single Phase Matrix® ONE produces the protection you need to extend the service life of your equipment.

Improve power quality and reduce downtime with our optimized single phase harmonic filters.

The Single Phase Matrix® ONE Filter is proven to produce harmonic mitigation for your VFD or other single phase power applications.

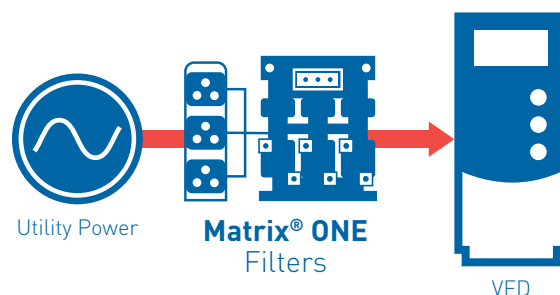
Patented design with reliable components provides harmonic mitigation and reduced THID (Total Harmonic Distortion) where you need it most.

Low cost solution that is easy to install and maintain.

Performance that is able to withstand harsh and remote conditions.

Extends service life of equipment by reducing heat, and improving system efficiency.

Alleviates system downtime by preventing blown fuses and tripped circuit breakers.

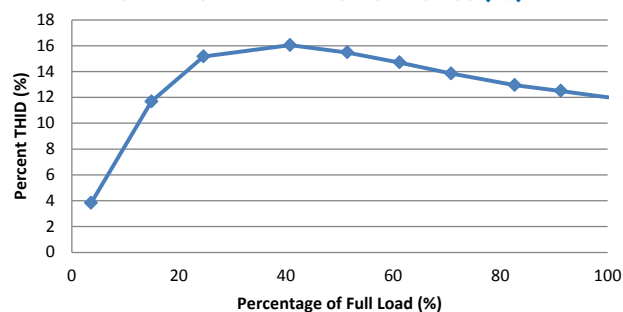


Performance Specifications

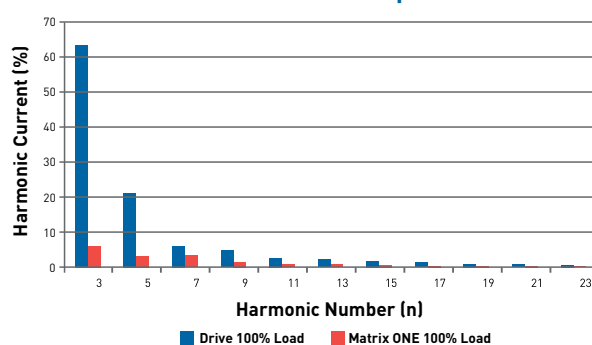
Service Load Condition	Load: typically a 4-pulse rectifier
Input Voltage	240V +/- 10%; 60 + 0.75Hz; 1-phase 480V +/- 10%; 60 + 0.75Hz; 1-phase
Maximum THID	12% @ Full Load
Maximum Ambient Temperature	-40C to +50C open panel filters; -40C to +40C enclosed filters; -40C to +90C storage
Insertion Load	+10% no load; -10% full load
Efficiency	97% - 99%
Altitude Without Derating	3,300 feet above sea level
Relative Humidity	0% to 95% non-condensing
Overload	150% for 1 minute duration

Final product specifications subject to change at anytime.

Matrix® ONE THID Performance (%)



Matrix® ONE Harmonic Spectrum Chart



How to properly size your filter

- **Determine voltage, frequency, and number of phases required**
- **Reference motor nameplate to determine motor HP or KW and Full Load Amps**
- **Select filter based on Motor Full Load Amps**
Do not exceed filter's maximum current rating (amps)
- **Specify enclosure style**
Open (No enclosure)
NEMA 1/2 (General Purpose Enclosure)
NEMA 3R (Outdoor Enclosure)
- **Determine derating requirements**
Reference Performance Specifications table on previous page as well as derating tables listed below:
Table 1: Drive Output Frequency Derating
Table 2: Altitude Derating Curve

Derating Curves:

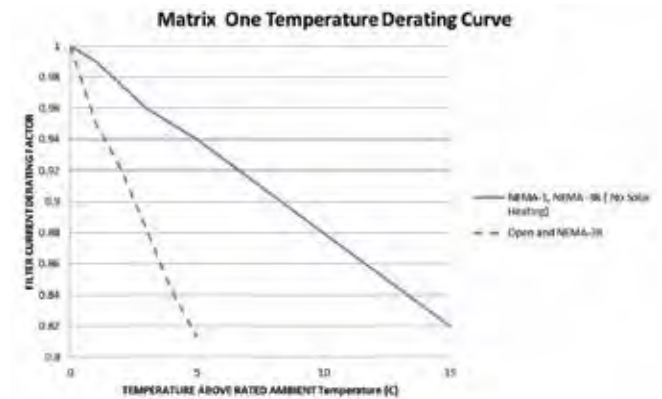


Table 1: Drive Output Frequency Derating

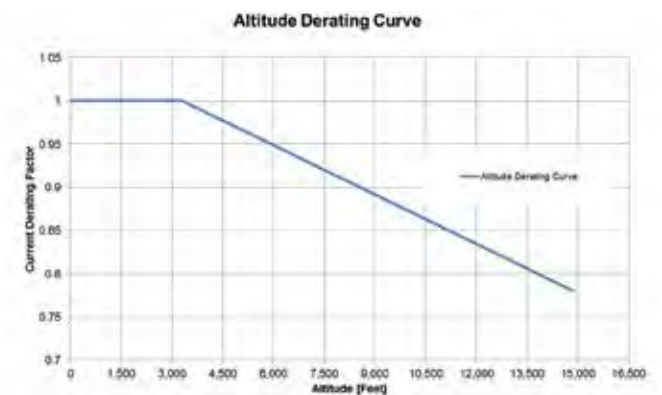


Table 2: Altitude Derating Curve

Understanding the Matrix® ONE Part Number:

MS X _ _ _ X

Matrix® ONE

Enclosure Type

P = Open Magnetics (No Enclosure)

G = General Purpose (NEMA 1/2)

W = Weather (NEMA 3R)

Current Rating

0008 is 8 Amps

0090 is 90 Amps

0620 is 620 Amps

Voltage Frequency Code

A 240 Volts 60 Hz

D 480 Volts 60 Hz

MATRIX® ONE SELECTION TABLES

240V 60 Hz													
Motor (Ref Only)	Filter Amps Rating	MTE Part Number	Enclosure Type	Filter Dimensions (H x W x D)		Approx Weight		Ref Fig	Watts Loss	Capacitor/Capacitor Panel Assembly Dimensions (H x W x D)		Qty Req'd	Ref Fig
HP				Inches	Millimeters	Lbs	Kgs			Inches	Millimeters		
3	17	MSP0017A	OPEN	8.7 x 10.5 x 7.2	221 x 267 x 183	42	19	7	181	6.4 x 3.5	163 x 89	1	2
		MSG0017A	NEMA 1/2	24.0 x 12.5 x 17.9	610 x 318 x 455	90	41	5		Preinstalled in cabinet			
		MSW0017A	NEMA 3R	24.0 x 12.5 x 23.0	610 x 318 x 584	98	44						
5	26	MSP0026A	OPEN	8.7 x 10.5 x 7.7	221 x 267 x 196	47	21	7	228	6.4 x 4.0	163 x 102	1	2
		MSG0026A	NEMA 1/2	24.0 x 12.5 x 17.9	610 x 318 x 455	96	44	5		Preinstalled in cabinet			
		MSW0026A	NEMA 3R	24.0 x 12.5 x 23.0	610 x 318 x 584	103	47						
7.5	38	MSP0038A	OPEN	10.5 x 12.0 x 9.6	267 x 305 x 244	69	31	9	258	6.9 x 18.4 x 7.0	175 x 467 x 178	1	3
		MSG0038A	NEMA 1/2	33.9 x 18.3 x 20.9	861 x 465 x 531	145	66	6		Preinstalled in cabinet			
		MSW0038A	NEMA 3R	33.9 x 18.3 x 26.0	861 x 465 x 660	152	69						
10	49	MSP0049A	OPEN	10.5 x 12.0 x 10.2	267 x 305 x 259	79	36	9	430	6.9 x 18.4 x 7.0	175 x 467 x 178	1	3
		MSG0049A	NEMA 1/2	33.9 x 18.3 x 20.9	861 x 465 x 531	155	70	6		Preinstalled in cabinet			
		MSW0049A	NEMA 3R	33.9 x 18.3 x 26.0	861 x 465 x 660	162	73						
15	73	MSP0073A	OPEN	10.6 x 12.0 x 12.0	269 x 305 x 305	114	52	9	473	10.7 x 18.4 x 7.0	272 x 467 x 178	1	3
		MSG0073A	NEMA 1/2	33.9 x 18.3 x 20.9	861 x 465 x 531	190	86	6		Preinstalled in cabinet			
		MSW0073A	NEMA 3R	33.9 x 18.3 x 26.0	861 x 465 x 660	198	90						
20	94	MSP0094A	OPEN	15.2 x 15.3 x 10.9	386 x 389 x 277	150	68	11	636	9.2 x 16.4 x 7.6	234 x 417 x 193	1	3
		MSG0094A	NEMA 1/2	51.3 x 27.7 x 24.9	1303 x 704 x 632	319	145	6		Preinstalled in cabinet			
		MSW0094A	NEMA 3R	51.3 x 27.7 x 30.0	1303 x 704 x 762	332	151						
25	115	MSP0115A	OPEN	15.2 x 15.3 x 11.6	386 x 389 x 295	167	76	11	631	6.9 x 16.3 x 7.6	175 x 414 x 193	1	3
		MSG0115A	NEMA 1/2	51.3 x 27.7 x 24.9	1303 x 704 x 632	338	153	6		Preinstalled in cabinet			
		MSW0115A	NEMA 3R	51.3 x 27.7 x 30.0	1303 x 704 x 762	351	159						
30	140	MSP0140A	OPEN	15.2 x 15.3 x 12.3	386 x 389 x 312	199	90	11	805	9.2 x 16.4 x 7.6	234 x 417 x 193	1	3
		MSG0140A	NEMA 1/2	51.3 x 27.7 x 24.9	1303 x 704 x 632	370	168	6		Preinstalled in cabinet			
		MSW0140A	NEMA 3R	51.3 x 27.7 x 30.0	1303 x 704 x 762	383	174						
40	180	MSP0180A	OPEN	15.3 x 15.3 x 14.6	389 x 389 x 371	248	112	11	1,055	9.9 x 16.4 x 7.6	251 x 417 x 193	1	4
		MSG0180A	NEMA 1/2	51.3 x 27.7 x 24.9	1303 x 704 x 632	418	190	6		Preinstalled in cabinet			
		MSW0180A	NEMA 3R	51.3 x 27.7 x 30.0	1303 x 704 x 762	431	195						
50	225	MSP0225A	OPEN	18.3 x 15.3 x 13.8	465 x 389 x 351	296	134	11	967	9.9 x 16.4 x 7.6	251 x 417 x 193	1	4
		MSG0225A	NEMA 1/2	51.3 x 27.7 x 24.9	1303 x 704 x 632	466	211	6		Preinstalled in cabinet			
		MSW0225A	NEMA 3R	51.3 x 27.7 x 30.0	1303 x 704 x 762	479	217						
60	265	MSP0265A	OPEN	18.4 x 15.3 x 14.9	467 x 389 x 378	317	144	11	1,115	9.9 x 16.4 x 7.6	251 x 417 x 193	2	4
		MSG0265A	NEMA 1/2	87.6 x 43.7 x 31.1	2225 x 1110 x 790	739	335	6		Preinstalled in cabinet			
		MSW0265A	NEMA 3R	87.6 x 43.7 x 40.1	2225 x 1110 x 1019	776	352						
75	330	MSP0330A	OPEN	18.4 x 15.3 x 16.7	467 x 389 x 424	377	171	11	1,359	9.9 x 16.4 x 7.6	251 x 417 x 193	2	4
		MSG0330A	NEMA 1/2	87.6 x 43.7 x 31.1	2225 x 1110 x 790	799	362	6		Preinstalled in cabinet			
		MSW0330A	NEMA 3R	87.6 x 43.7 x 40.1	2225 x 1110 x 1019	835	379						
100	430	MSP0430A	OPEN	20.5 x 24.0 x 17.4	521 x 610 x 442	612	278	12	1,647	9.6 x 16.4 x 7.6	244 x 417 x 193	1	3
		MSG0430A	NEMA 1/2	87.6 x 43.7 x 31.1	2225 x 1110 x 790	1,040	472	6		8.0 x 16.4 x 7.6	203 x 417 x 193	1	
		MSW0430A	NEMA 3R	87.6 x 43.7 x 40.1	2225 x 1110 x 1019	1,076	488			Preinstalled in cabinet			
125	540	MSP0540A	OPEN	20.6 x 24.0 x 18.5	523 x 610 x 470	718	326	12	1,872	11.5 x 16.3 x 7.6	292 x 414 x 193	1	3
		MSG0540A	NEMA 1/2	87.6 x 43.7 x 31.1	2225 x 1110 x 790	1,146	520	6		10.7 x 16.3 x 7.6	272 x 414 x 193	1	
		MSW0540A	NEMA 3R	87.6 x 43.7 x 40.1	2225 x 1110 x 1019	1,186	538			Preinstalled in cabinet			
150	620	MSP0620A	OPEN	20.6 x 24.0 x 19.7	523 x 610 x 500	827	375	12	2,094	11.5 x 16.3 x 7.6	292 x 414 x 193	2	3
		MSG0620A	NEMA 1/2	84.0 x 52.0 x 36.5	2134 x 1321 x 927	1,455	660	6		Preinstalled in cabinet			
		MSW0620A	NEMA 3R	84.0 x 52.0 x 45.5	2134 x 1321 x 1156	1,495	678						

480V 60 Hz

Motor (Ref Only)	Filter Amps Rating	MTE Part Number	Enclosure Type	Filter Dimensions (H x W x D)		Approx Weight		Ref Fig	Watts Loss	Capacitor/Capacitor Panel Assembly Dimensions (H x W x D)		Qty Req'd	Ref Fig
HP				Inches	Millimeters	Lbs	Kgs			Inches	Millimeters		
3	8	MSP0008D	OPEN	8.6 x 10.5 x 7.2	218 x 267 x 183	41	19	7	184	7.8 x 3.9	198 x 99	1	1
		MSG0008D	NEMA 1/2	24.0 x 12.5 x 17.9	610 x 318 x 455	89	40	5		Preinstalled in cabinet			
		MSW0008D	NEMA 3R	24.0 x 12.5 x 23.0	610 x 318 x 584	97	44						
5	13	MSP0013D	OPEN	8.7 x 10.5 x 7.7	221 x 267 x 196	51	23	7	219	8.3 x 4.6	211 x 117	1	1
		MSG0013D	NEMA 1/2	24.0 x 12.5 x 17.9	610 x 318 x 455	98	44	5		Preinstalled in cabinet			
		MSW0013D	NEMA 3R	24.0 x 12.5 x 23.0	610 x 318 x 584	106	48						
7.5	19	MSP0019D	OPEN	10.5 x 12.0 x 8.0	267 x 305 x 203	67	30	8	292	8.3 x 4.6	211 x 117	1	1
		MSG0019D	NEMA 1/2	33.9 x 18.3 x 20.9	861 x 465 x 531	142	64	6		Preinstalled in cabinet			
		MSW0019D	NEMA 3R	33.9 x 18.3 x 26.0	861 x 465 x 660	149	68						
10	24	MSP0024D	OPEN	10.5 x 12.0 x 8.5	267 x 305 x 216	75	34	8	350	9.2 x 4.6	234 x 117	1	1
		MSG0024D	NEMA 1/2	33.9 x 18.3 x 20.9	861 x 465 x 531	149	68	6		Preinstalled in cabinet			
		MSW0024D	NEMA 3R	33.9 x 18.3 x 26.0	861 x 465 x 660	157	71						
15	37	MSP0037D	OPEN	10.6 x 12.0 x 11.8	269 x 305 x 300	106	48	9	509	6.4 x 3.5	163 x 89	1	2
		MSG0037D	NEMA 1/2	33.9 x 18.3 x 20.9	861 x 465 x 531	181	82	6		Preinstalled in cabinet			
		MSW0037D	NEMA 3R	33.9 x 18.3 x 26.0	861 x 465 x 660	192	87						
20	47	MSP0047D	OPEN	15.2 x 15.3 x 10.9	386 x 389 x 277	145	66	10	667	10.9 x 16.4 x 7.6	277 x 417 x 193	1	4
		MSG0047D	NEMA 1/2	51.3 x 27.7 x 24.9	1303 x 704 x 632	311	141	6		Preinstalled in cabinet			
		MSW0047D	NEMA 3R	51.3 x 27.7 x 30.0	1303 x 704 x 762	324	147						
25	59	MSP0059D	OPEN	10.2 x 15.3 x 11.7	259 x 389 x 297	159	72	10	648	7.9 x 16.3 x 7.6	201 x 414 x 193	1	3
		MSG0059D	NEMA 1/2	51.3 x 27.7 x 24.9	1303 x 704 x 632	325	147	6		Preinstalled in cabinet			
		MSW0059D	NEMA 3R	51.3 x 27.7 x 30.0	1303 x 704 x 762	338	153						
30	69	MSP0069D	OPEN	15.1 x 15.3 x 11.8	384 x 389 x 300	164	74	10	629	6.7 x 16.4 x 7.6	170 x 417 x 193	1	4
		MSG0069D	NEMA 1/2	51.3 x 27.7 x 24.9	1303 x 704 x 632	330	150	6		Preinstalled in cabinet			
		MSW0069D	NEMA 3R	51.3 x 27.7 x 30.0	1303 x 704 x 762	343	156						
40	90	MSP0090D	OPEN	15.2 x 15.3 x 13.2	386 x 389 x 335	217	98	11	818	6.9 x 16.3 x 7.6	175 x 414 x 193	1	3
		MSG0090D	NEMA 1/2	51.3 x 27.7 x 24.9	1303 x 704 x 632	387	176	6		Preinstalled in cabinet			
		MSW0090D	NEMA 3R	51.3 x 27.7 x 30.0	1303 x 704 x 762	400	181						
50	110	MSP0110D	OPEN	18.3 x 15.3 x 12.9	465 x 389 x 328	254	115	11	1,010	7.7 x 16.4 x 7.6	196 x 417 x 193	1	4
		MSG0110D	NEMA 1/2	76.0 x 27.7 x 24.9	1930 x 704 x 632	497	225	6		Preinstalled in cabinet			
		MSW0110D	NEMA 3R	76.0 x 27.7 x 34.0	1930 x 704 x 864	523	237						
60	135	MSP0135D	OPEN	18.3 x 15.3 x 14.3	465 x 389 x 363	303	137	11	1,287	7.7 x 16.4 x 7.6	196 x 417 x 193	2	4
		MSG0135D	NEMA 1/2	76.0 x 27.7 x 24.9	1930 x 704 x 632	546	248	6		Preinstalled in cabinet			
		MSW0135D	NEMA 3R	76.0 x 27.7 x 34.0	1930 x 704 x 864	571	259						
75	165	MSP0165D	OPEN	18.3 x 15.3 x 15.4	465 x 389 x 391	349	158	11	1,503	9.2 x 16.4 x 7.6	234 x 417 x 193	1	4
		MSG0165D	NEMA 1/2	76.0 x 27.7 x 24.9	1930 x 704 x 632	590	268	6		Preinstalled in cabinet			
		MSW0165D	NEMA 3R	76.0 x 27.7 x 34.0	1930 x 704 x 864	616	279						
100	215	MSP0215D	OPEN	20.4 x 24.0 x 15.7	518 x 610 x 399	582	264	12	1,409	6.7 x 16.4 x 7.6	170 x 417 x 193	2	4
		MSG0215D	NEMA 1/2	87.6 x 43.7 x 31.1	2225 x 1110 x 790	1,005	456	6		Preinstalled in cabinet			
		MSW0215D	NEMA 3R	87.6 x 43.7 x 40.1	2225 x 1110 x 1019	1,050	476						
125	270	MSP0270D	OPEN	20.3 x 24.0 x 18.7	516 x 610 x 475	690	313	12	1,641	6.9 x 16.3 x 7.6	175 x 414 x 193	1	3
		MSG0270D	NEMA 1/2	87.6 x 43.7 x 31.1	2225 x 1110 x 790	1,113	505	6		7.9 x 16.3 x 7.6	201 x 414 x 193	1	
		MSW0270D	NEMA 3R	87.6 x 43.7 x 40.1	2225 x 1110 x 1019	1,147	520			Preinstalled in cabinet			
150	310	MSP0310D	OPEN	20.3 x 24.0 x 20.2	516 x 610 x 513	787	357	12	1,797	7.9 x 16.3 x 7.6	201 x 414 x 193	2	3
		MSG0310D	NEMA 1/2	84.0 x 52.0 x 36.5	2134 x 1321 x 927	1,408	639	6		Preinstalled in cabinet			
		MSW0310D	NEMA 3R	84.0 x 52.0 x 45.5	2134 x 1321 x 1156	1,449	657						

CAPACITOR

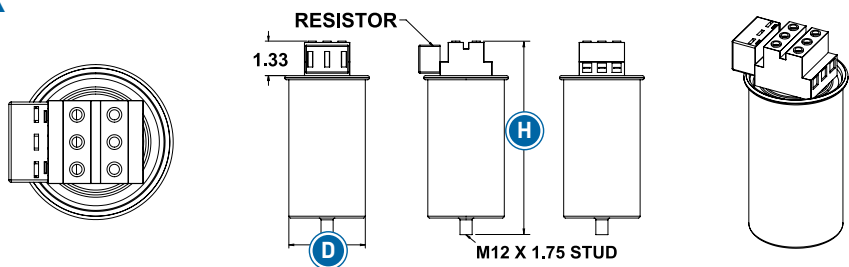


FIGURE 1

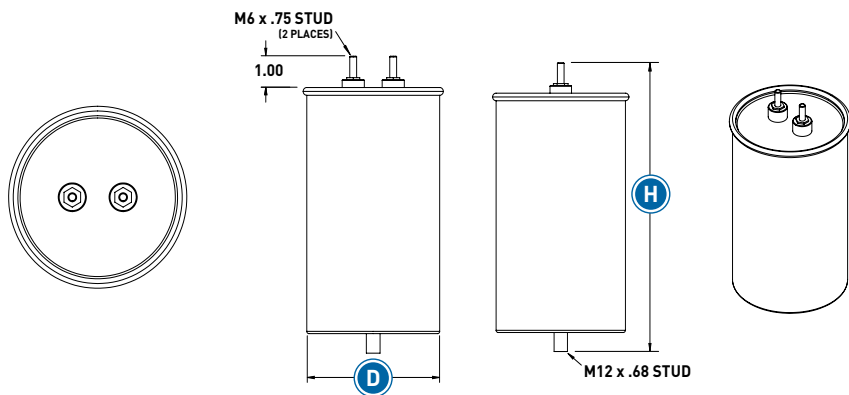


FIGURE 2

CAPACITOR PANEL

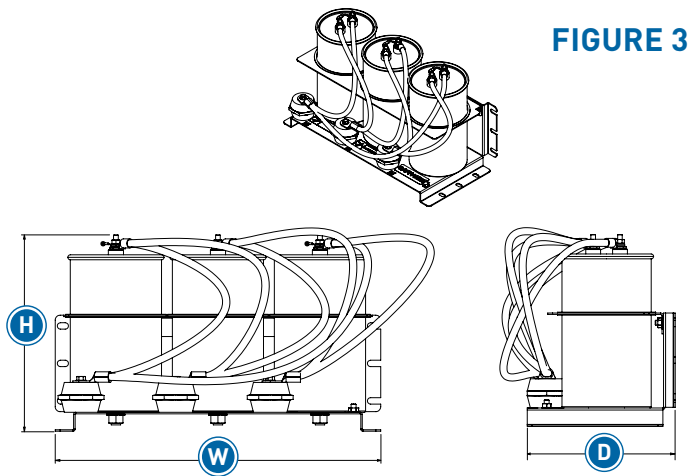


FIGURE 3

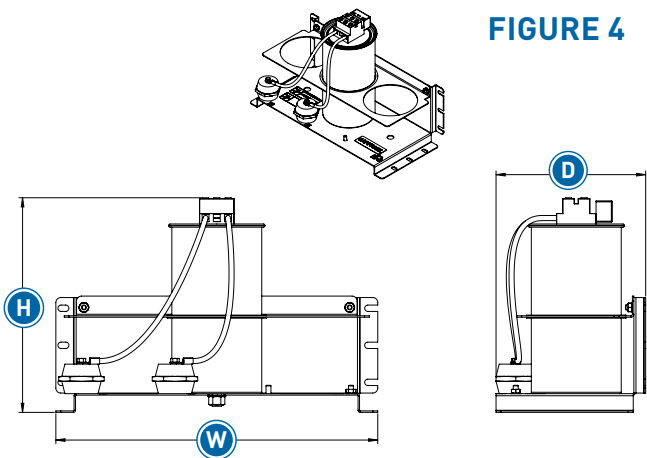


FIGURE 4

ENCLOSURES

(NOTE: HOODS ONLY ON NEMA 3R ENCLOSURES)

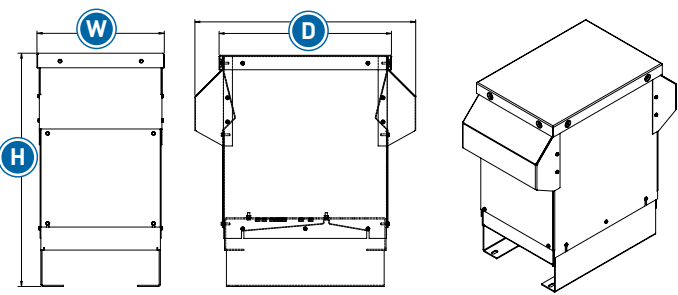


FIGURE 5

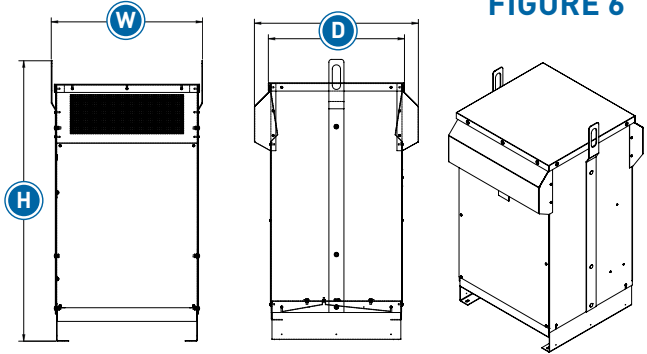


FIGURE 6

OPEN MAGNETICS

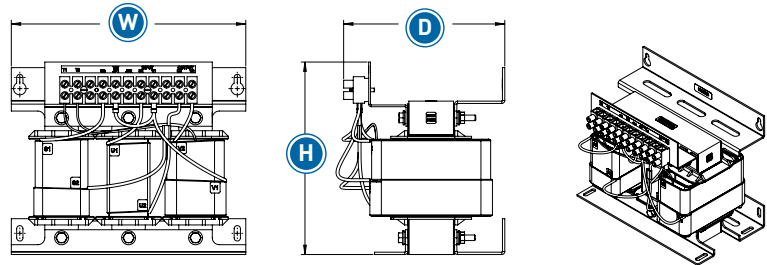


FIGURE 7

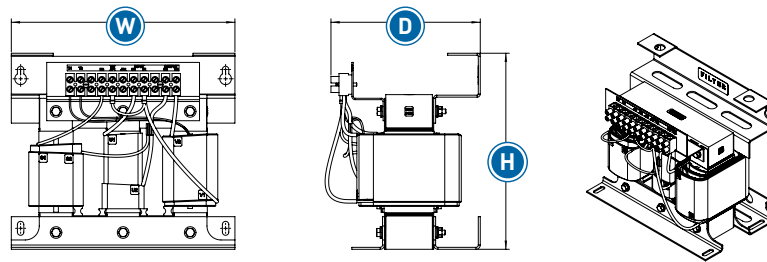


FIGURE 8

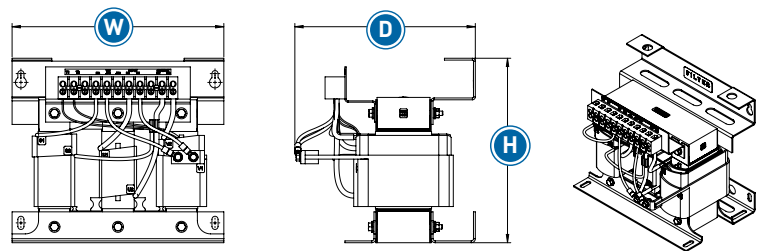


FIGURE 9

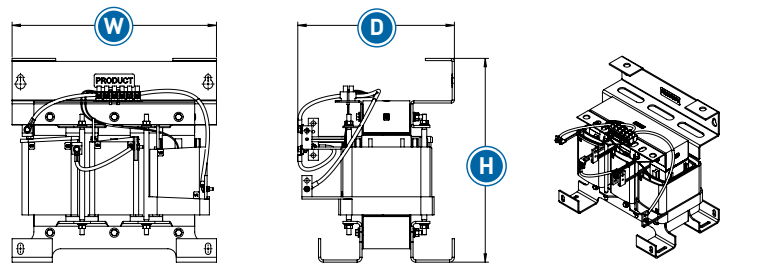


FIGURE 10

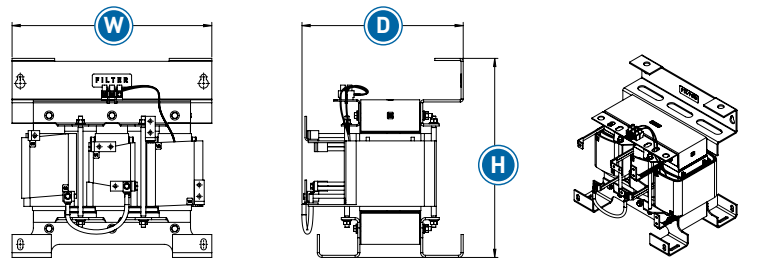


FIGURE 11

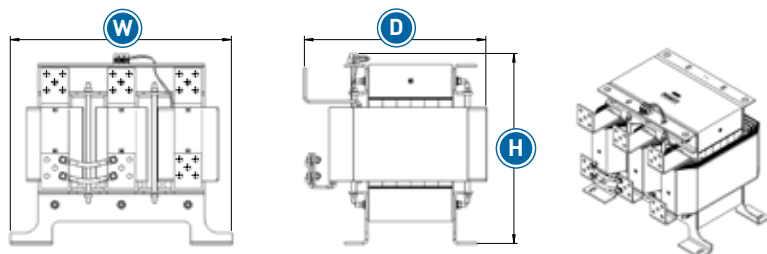


FIGURE 12

Note: Figure illustrations are for reference only. Actual hardware may differ. Please visit mtecorp.com for detailed information.



Motor Protection Filters

dV Sentry™

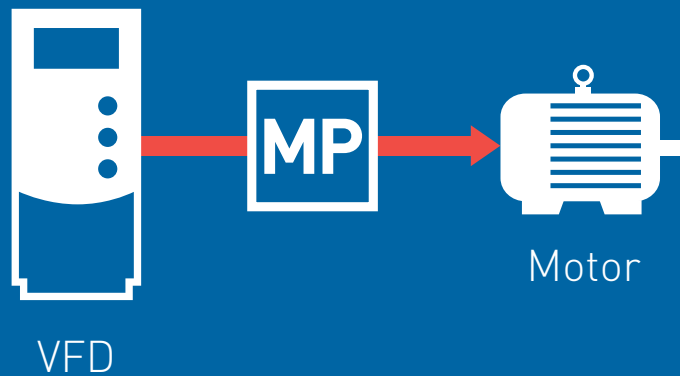
Next generation dV/dt Filters for motor protection

SineWave Guardian™

Best-in-class SineWave Filter for cleaning PWM waveforms out to 15,000 ft

High Frequency SineWave Guardian™

The optimized motor protection solution for high frequency motors



dV/dt Filters dV Sentry™ Product Selector



- True common mode reduction, peak voltage protection, and rise time reduction
- World leading motor protection technology in the market
- Low watts loss
- Small, advanced, robust design, easily installed
- Quiet as a conversation
- Three-year warranty

The future is here.

The dV Sentry™ is the revolutionary solution for motor protection with its unique all-in-one design. It is the only filter on the market proven to provide common mode and rise time reduction, as well as peak voltage protection. This gives greater motor protection over time.

It features a small footprint and easy terminations to make installation faster and easier. Plus, it runs quietly and radiates less heat than previous filters. The dV Sentry™ is unique, and when it comes to motor protection, there is nothing better.

With the patented dV Sentry™, you get the most advanced motor protection in its class.

The unique design of the dV Sentry™ allows for greater load side protection from voltage spikes and common mode voltages for your AC motors cable and VFDs.

Patented design provides over 50% common mode reduction, peak voltage protection, and rise time reduction - all in one filter.

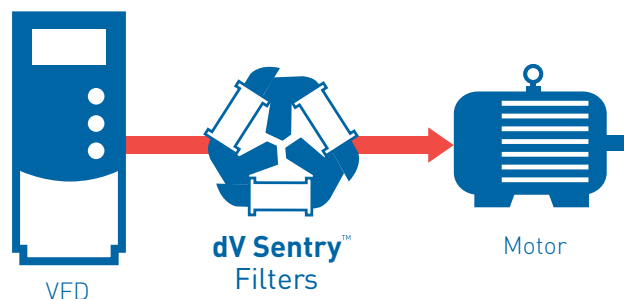
Low watts loss reduces heating in systems.

Small footprint, with a unique flat design, allows filter to be easily integrated.

Strong robust design allows the filter to withstand installation and other difficult environments.

Runs quieter, comparable to a normal conversation.

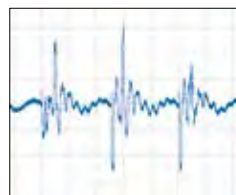
dV Sentry™



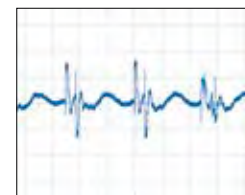
Performance Specifications

Input Voltage	208V - 600V +/- 10%; 60Hz
Inverter Operating Frequency	0 - 90Hz without derating
Maximum Ambient Temperature	-40C to +60C modular filter -40C to +50C enclosed filter
Insertion Loss (Voltage)	1.7% @ 60Hz; 2.6% @ 90Hz
Efficiency	>99%
Altitude Without Derating	3,300 feet above sea level
Maximum Motor Lead Length	1,000 feet
Relative Humidity	0% to 99% non-condensing
Current Rating	100% RMS continuous; 150% for 1 minute; 200% for 10 sec* *Operating in overload will result in increased proportional voltage drop
Rise Time	Less than 0.1 uS
Peak Voltage	150% of DC bus voltage up to 1,000 feet
Common Mode Reduction	50%+ peak current reduction typical

Common Mode Reduction:

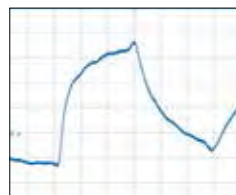


Without dV Sentry™

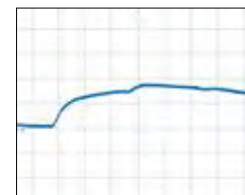


With dV Sentry™

Peak Rise Protection:

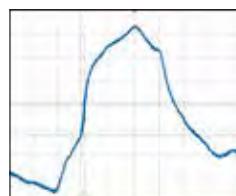


Without dV Sentry™

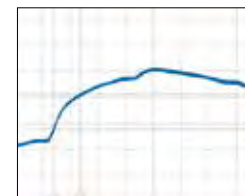


With dV Sentry™

Rise Time Reduction:



Without dV Sentry™



With dV Sentry™

Final product specifications subject to change at anytime.

How to properly size your filter

- **Determine input voltage and frequency requirements**
- **Reference motor nameplate to determine motor HP or KW and Full Load Amps**
- **Verify motor meets inverter duty standards per NEMA MG1 Section 31**
- **Select filter based on Motor Full Load Amps**
Do not exceed filter's maximum current rating (amps)
- **Specify enclosure style**
Open (No enclosure)
NEMA 1/2 (General Purpose Enclosure)
NEMA 3R (Outdoor Enclosure)
- **Determine derating requirements**
Reference Performance Specifications table on previous page as well as derating tables listed below:

Table 1: Drive Output Frequency

Table 2: Altitude Derating Curve
- **Note: Filters cannot be paralleled for higher current ratings.**

Derating Curves:

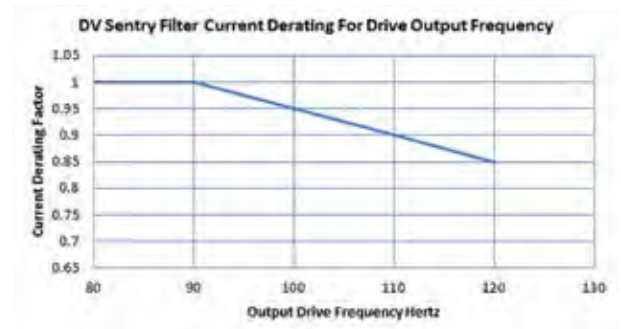


Table 1: Drive Output Frequency

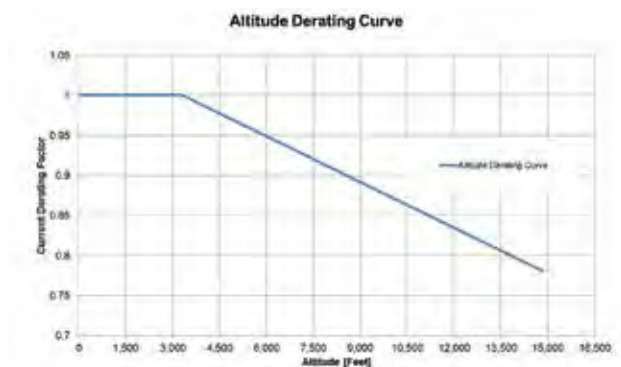
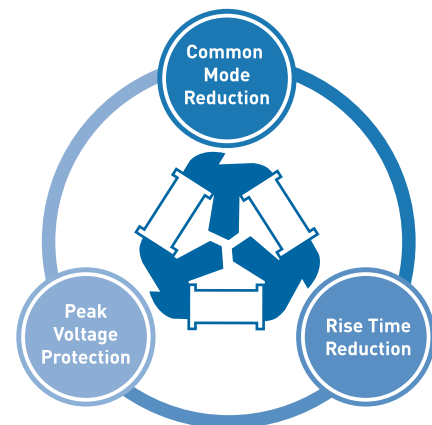
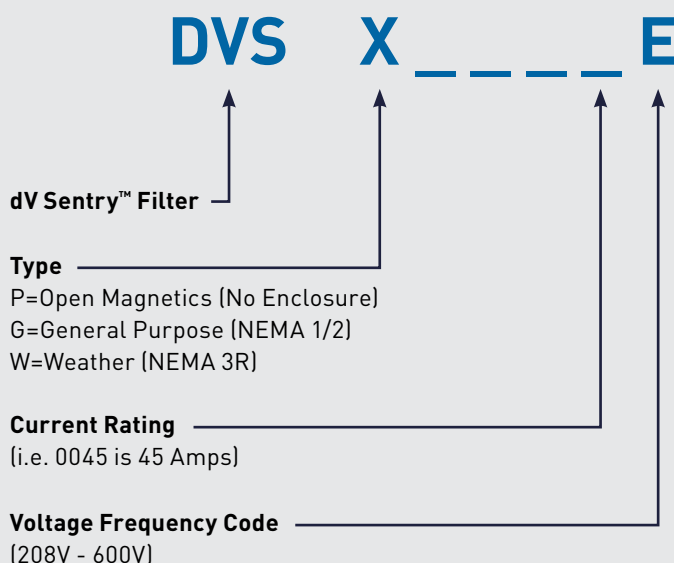


Table 2: Altitude Derating Curve

Understanding the dV Sentry™ Part Number:



dV SENTRY™ SELECTION TABLES

208 - 600V 50/60Hz																
Motor (Ref Only)					Filter Amps Rating	MTE Part Number	Enclosure Type	Filter Dimensions (H x W x D)		Approx Weight		Ref Fig	Watts Loss	Resistor Panel Dimensions (H x W x D)		Ref Fig
208V HP	240V HP	380V KW	480V HP	550- 600V HP				Inches	Millimeters	Lbs	Kgs			Inches	Millimeters	
0.5	0.75	0.5- 1.1	0.5- 1.5	0.5-2	3	DVSP0003E	OPEN	9.1 x 6.7 x 7.7	231 x 170 x 196	7	3	2	67	Preinstalled on reactor panel		
						DVSG0003E	NEMA 1/2	13.2 x 13.0 x 13.1	335 x 330 x 333	18	8	6		Preinstalled in cabinet		
						DVSW0003E	NEMA 3R	15.5 x 11.0 x 12.0	394 x 279 x 305	29	13	8				
0.75	1	1.5	2	3	4	DVSP0004E	OPEN	9.1 x 6.7 x 7.7	231 x 170 x 196	7	3	2	67	Preinstalled on reactor panel		
						DVSG0004E	NEMA 1/2	13.2 x 13.0 x 13.1	335 x 330 x 333	18	8	6		Preinstalled in cabinet		
						DVSW0004E	NEMA 3R	15.5 x 11.0 x 12.0	394 x 279 x 305	29	13	8				
1.5	2	2.2-3	3	5	7	DVSP0007E	OPEN	9.1 x 6.7 x 7.7	231 x 170 x 196	7	3	2	67	Preinstalled on reactor panel		
						DVSG0007E	NEMA 1/2	13.2 x 13.0 x 13.1	335 x 330 x 333	18	8	6		Preinstalled in cabinet		
						DVSW0007E	NEMA 3R	15.5 x 11.0 x 12.0	394 x 279 x 305	29	13	8				
2	3	4	5	7.5	9	DVSP0009E	OPEN	9.1 x 6.7 x 7.7	231 x 170 x 196	7	3	2	67	Preinstalled on reactor panel		
						DVSG0009E	NEMA 1/2	13.2 x 13.0 x 13.1	335 x 330 x 333	18	8	6		Preinstalled in cabinet		
						DVSW0009E	NEMA 3R	15.5 x 11.0 x 12.0	394 x 279 x 305	29	13	8				
3	4	5.5	7.5	10	12	DVSP0012E	OPEN	9.1 x 6.7 x 7.7	231 x 170 x 196	7	3	2	67	Preinstalled on reactor panel		
						DVSG0012E	NEMA 1/2	13.2 x 13.0 x 13.1	335 x 330 x 333	18	8	6		Preinstalled in cabinet		
						DVSW0012E	NEMA 3R	15.5 x 11.0 x 12.0	394 x 279 x 305	29	13	8				
5	5.5	7.5	10	15	17	DVSP0017E	OPEN	9.1 x 6.7 x 7.5	231 x 170 x 191	8	4	2	96	Preinstalled on reactor panel		
						DVSG0017E	NEMA 1/2	13.2 x 13.0 x 13.1	335 x 330 x 333	19	9	6		Preinstalled in cabinet		
						DVSW0017E	NEMA 3R	15.5 x 11.0 x 12.0	394 x 279 x 305	30	14	8				
5.5	7.5	11	15	20	22	DVSP0022E	OPEN	9.1 x 6.7 x 8.2	231 x 170 x 208	11	5	2	91	Preinstalled on reactor panel		
						DVSG0022E	NEMA 1/2	13.2 x 13.0 x 13.1	335 x 330 x 333	22	10	6		Preinstalled in cabinet		
						DVSW0022E	NEMA 3R	15.5 x 11.0 x 12.0	394 x 279 x 305	32	15	8				
7.5	10	-	20	25	27	DVSP0027E	OPEN	9.1 x 6.7 x 8.2	231 x 170 x 208	11	5	2	92	Preinstalled on reactor panel		
						DVSG0027E	NEMA 1/2	13.2 x 13.0 x 13.1	335 x 330 x 333	22	10	6		Preinstalled in cabinet		
						DVSW0027E	NEMA 3R	15.5 x 11.0 x 12.0	394 x 279 x 305	32	15	8				
10	12.5	15	25	30	35	DVSP0035E	OPEN	12.0 x 9.0 x 8.0	305 x 229 x 203	15	7	3	91	Preinstalled on reactor panel		
						DVSG0035E	NEMA 1/2	13.2 x 13.0 x 13.1	335 x 330 x 333	25	11	6		Preinstalled in cabinet		
						DVSW0035E	NEMA 3R	15.5 x 11.0 x 12.0	394 x 279 x 305	35	16	8				
12.5	15	18.5- 22	30	40	45	DVSP0045E	OPEN	12.0 x 9.0 x 8.0	305 x 229 x 203	16	7	3	88	Preinstalled on reactor panel		
						DVSG0045E	NEMA 1/2	13.2 x 13.0 x 13.1	335 x 330 x 333	25	11	6		Preinstalled in cabinet		
						DVSW0045E	NEMA 3R	15.5 x 11.0 x 12.0	394 x 279 x 305	35	16	8				
15	20	-	40	50	55	DVSP0055E	OPEN	12.0 x 9.0 x 8.2	305 x 229 x 208	22	10	3	137	Preinstalled on reactor panel		
						DVSG0055E	NEMA 1/2	13.2 x 13.0 x 13.1	335 x 330 x 333	32	15	6		Preinstalled in cabinet		
						DVSW0055E	NEMA 3R	24.0 x 12.5 x 23.0	610 x 318 x 584	75	34	9				
20	25	30	50	60	65	DVSP0065E	OPEN	12.0 x 9.0 x 11.1	305 x 229 x 282	31	14	3	166	Preinstalled on reactor panel		
						DVSG0065E	NEMA 1/2	13.2 x 13.0 x 13.1	335 x 330 x 333	41	19	6		Preinstalled in cabinet		
						DVSW0065E	NEMA 3R	24.0 x 12.5 x 23.0	610 x 318 x 584	84	38	9				

Note: Weights and dimensions are for reference only. Please visit mtecorp.com for detailed information.

208 - 600V 50/60Hz

Motor (Ref Only)					Filter Amps Rating	MTE Part Number	Enclosure Type	Filter Dimensions (H x W x D)		Approx Weight		Ref Fig	Watts Loss	Resistor Panel Dimensions (H x W x D)			Ref Fig
208V HP	240V HP	380V KW	480V HP	550- 600V HP				Inches	Millimeters	Lbs	Kgs			Inches	Millimeters		
25	30	37	60	75	80	DVSP0080E	OPEN	12.0 x 9.0 x 11.1	305 x 229 x 282	32	15	3	158	Preinstalled on reactor panel			
						DVSG0080E	NEMA 1/2	13.2 x 13.0 x 13.1	335 x 330 x 333	42	19	6		Preinstalled in cabinet			
						DVSW0080E	NEMA 3R	24.0 x 12.5 x 23.0	610 x 318 x 584	85	39	9					
30	40	45- 55	75	100	110	DVSP0110E	OPEN	12.0 x 9.0 x 11.1	305 x 229 x 282	36	16	3	175	Preinstalled on reactor panel			
						DVSG0110E	NEMA 1/2	13.2 x 13.0 x 13.1	335 x 330 x 333	43	20	6		Preinstalled in cabinet			
						DVSW0110E	NEMA 3R	24.0 x 12.5 x 23.0	610 x 318 x 584	89	40	9					
40	50	-	100	125	130	DVSP0130E	OPEN	13.5 x 13.6 x 7.9	343 x 345 x 201	56	25	4	273	18.4 x 5.0 x 7.0	467 x 127 x 178	1A	
						DVSG0130E	NEMA 1/2	24.0 x 17.1 x 18.5	610 x 434 x 470	97	44	7		Preinstalled in cabinet			
						DVSW0130E	NEMA 3R	33.9 x 18.3 x 26.0	861 x 465 x 660	139	63	10					
50	60	75- 90	125	150	160	DVSP0160E	OPEN	13.5 x 13.6 x 9.1	343 x 345 x 231	72	33	4	289	18.4 x 5.0 x 7.0	467 x 127 x 178	1A	
						DVSG0160E	NEMA 1/2	24.0 x 17.1 x 18.5	610 x 434 x 470	113	51	7		Preinstalled in cabinet			
						DVSW0160E	NEMA 3R	33.9 x 18.3 x 26.0	861 x 465 x 660	155	70	10					
60	75	110	150	200	200	DVSP0200E	OPEN	13.5 x 13.6 x 9.1	343 x 345 x 231	76	34	4	325	17.0 x 14.0 x 7.0	432 x 356 x 178	1A	
						DVSG0200E	NEMA 1/2	24.0 x 17.1 x 18.5	610 x 434 x 470	116	53	7		Preinstalled in cabinet			
						DVSW0200E	NEMA 3R	33.9 x 18.3 x 26.0	861 x 465 x 660	157	71	10					
75	100	132	200	250	250	DVSP0250E	OPEN	15.0 x 15.1 x 10.3	381 x 384 x 262	90	41	5	423	18.4 x 5.0 x 7.0	467 x 127 x 178	1A	
						DVSG0250E	NEMA 1/2	33.9 x 18.3 x 20.9	861 x 465 x 531	165	75	10		Preinstalled in cabinet			
						DVSW0250E	NEMA 3R	33.9 x 18.3 x 26.0	861 x 465 x 660	173	78	10					
100	125	160	250	300	305	DVSP0305E	OPEN	15.2 x 15.1 x 10.4	386 x 384 x 264	94	43	5	481	18.4 x 5.0 x 7.0	467 x 127 x 178	1A	
						DVSG0305E	NEMA 1/2	33.9 x 18.3 x 20.9	861 x 465 x 531	170	77	10		Preinstalled in cabinet			
						DVSW0305E	NEMA 3R	33.9 x 18.3 x 26.0	861 x 465 x 660	177	80	10					
125	150	185- 200	300	350	365	DVSP0365E	OPEN	15.1 x 15.1 x 11.8	384 x 384 x 300	125	57	5	564	18.4 x 5.0 x 7.0	467 x 127 x 178	1A	
						DVSG0365E	NEMA 1/2	33.9 x 18.3 x 20.9	861 x 465 x 531	200	91	10		Preinstalled in cabinet			
						DVSW0365E	NEMA 3R	33.9 x 18.3 x 26.0	861 x 465 x 660	208	94	10					
150	175	-	350	450	415	DVSP0415E	OPEN	15.1 x 15.1 x 11.8	384 x 384 x 300	125	57	5	795	18.4 x 5.0 x 7.0	467 x 127 x 178	1A	
						DVSG0415E	NEMA 1/2	33.9 x 18.3 x 20.9	861 x 465 x 531	200	91	10		Preinstalled in cabinet			
						DVSW0415E	NEMA 3R	33.9 x 18.3 x 26.0	861 x 465 x 660	208	94	10					
175	225	250	400- 450	500- 550	515	DVSP0515E	OPEN	14.9 x 15.1 x 13.3	378 x 384 x 338	158	72	5	798	18.4 x 5.0 x 7.0	467 x 127 x 178	1B	
						DVSG0515E	NEMA 1/2	51.3 x 27.7 x 24.9	1303 x 704 x 632	326	148	10		Preinstalled in cabinet			
						DVSW0515E	NEMA 3R	51.3 x 27.7 x 30.0	1303 x 704 x 762	339	154	10					
200	250	315	500	600	600	DVSP0600E	OPEN	15.1 x 15.1 x 13.4	384 x 384 x 340	165	75	5	822	18.4 x 5.0 x 7.0	467 x 127 x 178	1B	
						DVSG0600E	NEMA 1/2	51.3 x 27.7 x 24.9	1303 x 704 x 632	332	151	10		Preinstalled in cabinet			
						DVSW0600E	NEMA 3R	51.3 x 27.7 x 30.0	1303 x 704 x 762	345	156	10					

Note: Weights and dimensions are for reference only. Please visit mtecorp.com for detailed information.

REFERENCE FIGURES

RESISTOR PANEL

FIGURE 1A

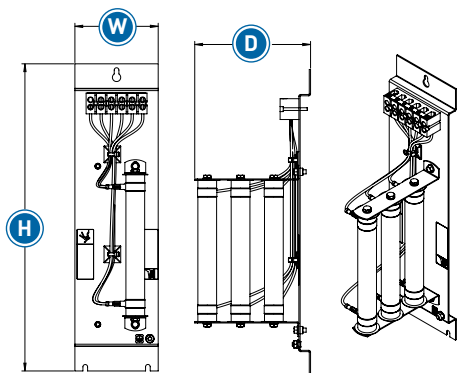
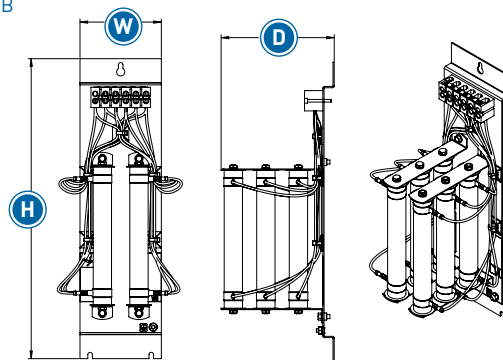


FIGURE 1B



OPEN MAGNETICS

FIGURE 2

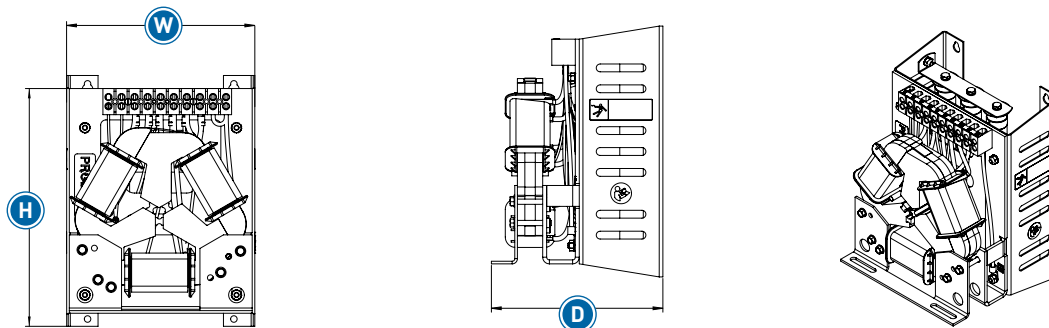


FIGURE 3

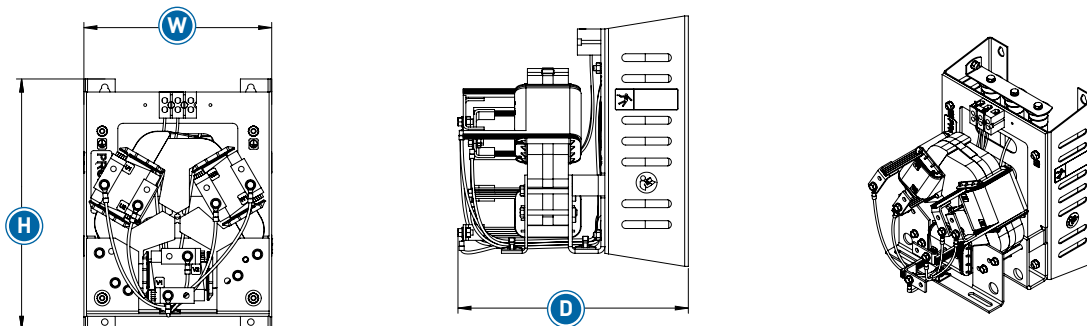


FIGURE 4

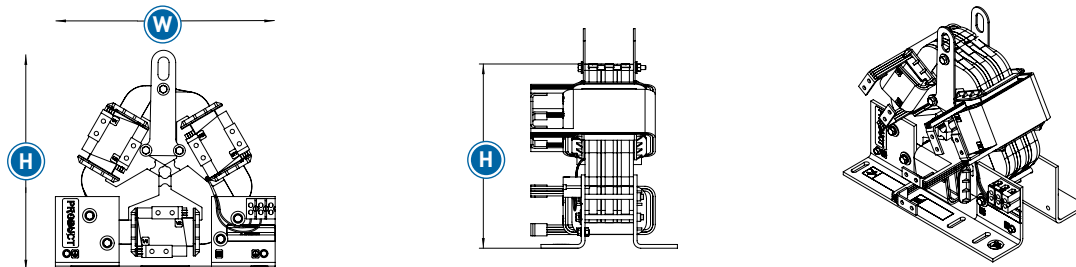
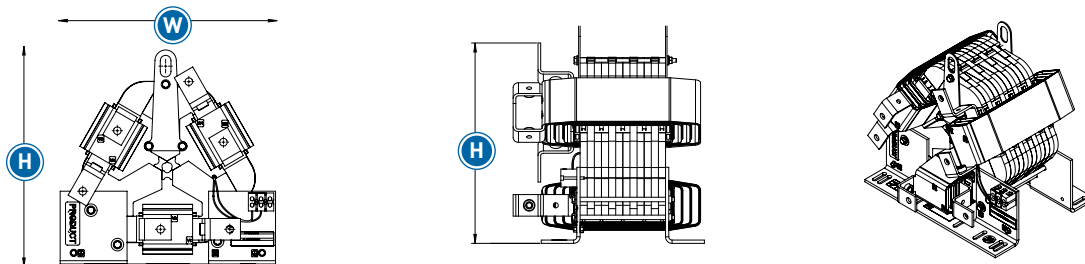


FIGURE 5



ENCLOSURES

FIGURE 6

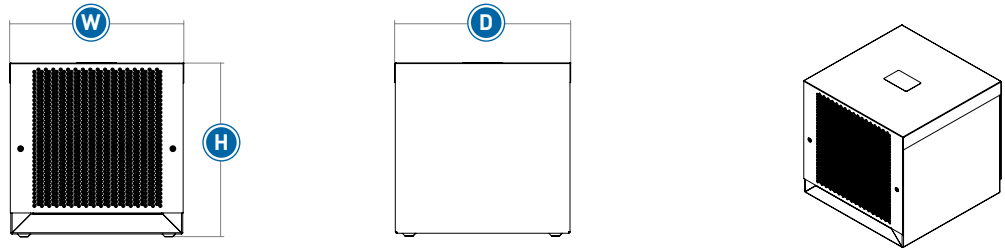


FIGURE 7

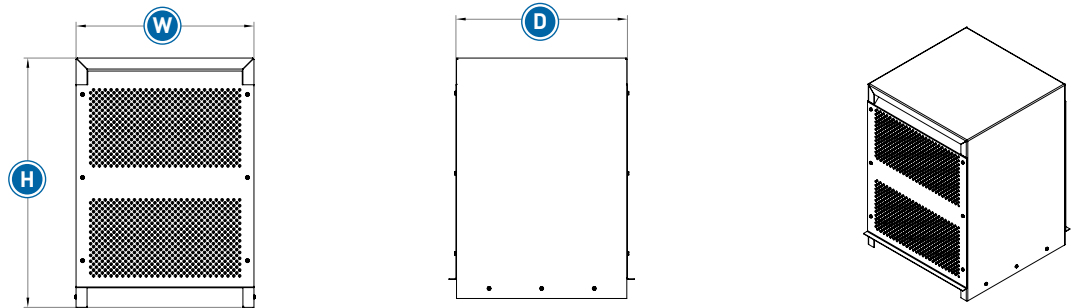


FIGURE 8

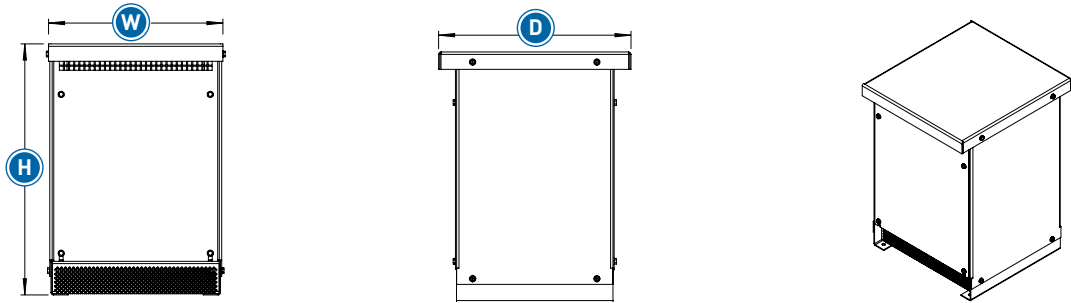
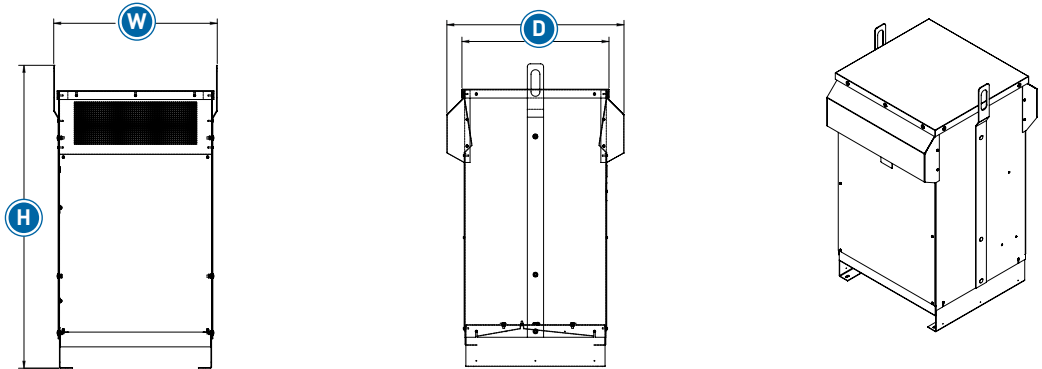
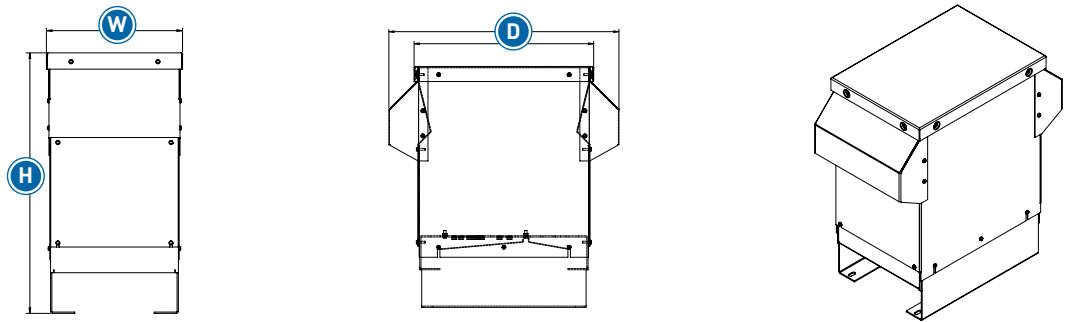


FIGURE 9



NOTE: HOODS
ONLY ON NEMA
3R ENCLOSURES

FIGURE 10



NOTE: HOODS
ONLY ON NEMA
3R ENCLOSURES



Motor Protection Filters

dV Sentry™

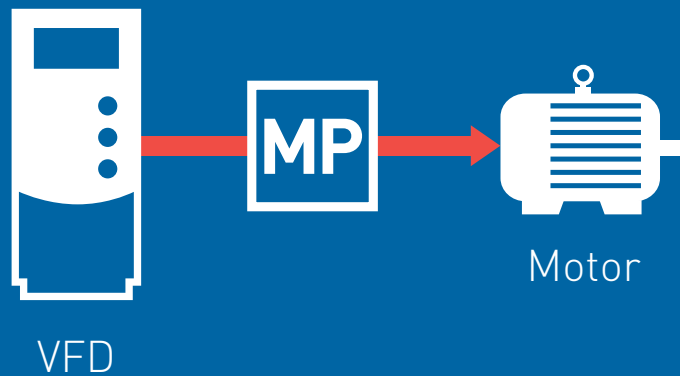
Next generation dV/dt Filters for motor protection

SineWave Guardian™

Best-in-class SineWave Filter for cleaning PWM waveforms out to 15,000 ft

High Frequency SineWave Guardian™

The optimized motor protection solution for high frequency motors



SineWave Guardian™

Product Selector



- **Increases motor life**
- **Easy to integrate, install and service**
- **Operates in high ambient temperatures**
- **High performance and reliability**
- **Three-year warranty**

For motor protection, there is nothing better.

Motor protection and power quality don't have to be a mystery. MTE makes it easy. Case in point: our SineWave Guardian™ Filter. This best-in-class filter delivers unequalled performance in cleaning the PWM waveforms generated by Variable Frequency Drives (VFDs). It virtually eliminates high frequency content and voltage peaks, thereby reducing motor heating to give you extended motor life – and less downtime. The SineWave Guardian™ also offers incredible reliability and durability. It is more efficient and tolerates higher ambient temperatures, making it ideal for a variety of applications from steel mills to oil fields. Its modular design and smaller footprint make it easier to integrate and install. It all adds up to the best SineWave Filter, and the best value on the market today.

Improve efficiency, improve motor life, and improve your bottom line with our new SineWave Guardian™.

SineWave Guardian™ Filters transform the output of Variable Frequency Drives (VFDs) to a near perfect sinusoidal waveform for the best level of motor protection. MTE's unique, patent-pending design offers high performance with smaller size and better efficiency than traditional LC Filters.

Increase motor life: Reduce motor heating through reduction of high frequencies associated with VFD output and also reduce motor insulation stress through reduction of motor peak voltages.

Reduce motor audible noise: Reduce audible noise through reducing high frequencies associated with VFD output.

Reduce radiated emissions: Reduce emissions through reducing high frequencies associated with VFD output.

Protect your motor cable: The reduction of high frequencies associated with VFD output eliminates the need for special motor cables.

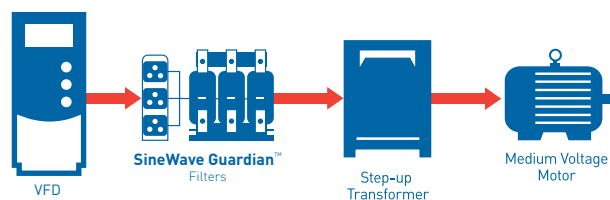
SineWave Guardian™



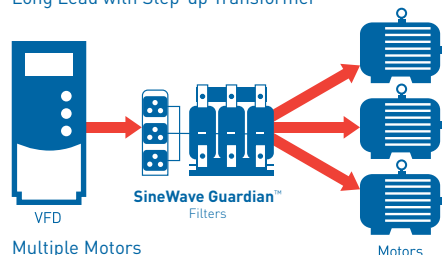
Application Configurations:



Extreme Long Lead to Motor

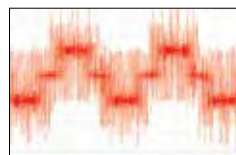


Long Lead with Step-up Transformer

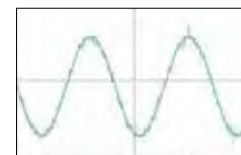


Multiple Motors

SineWave Guardian™ Performance:



Without SineWave Guardian™



With SineWave Guardian™

The SineWave Guardian™ is a SineWave Filter which protects motors from damage by "cleaning" the sine wave waveform that is generated by the Variable Frequency Drive.

Performance Specifications

Service Load Condition	Conventional 3 phase motors operating in volts per hertz mode, standard step-up transformer optional
Input Voltage	380V - 480V +/- 10%
Harmonic Voltage Distortion	5% maximum @ 2kHz
Inverter Switching Frequency	2kHz to 8kHz
Inverter Operating Frequency	6Hz to 75Hz; >75Hz to 120Hz with derating
Maximum Ambient Temperature	-40C to +60C modular filter -40C to +55C enclosed filter -40C to +90C storage
Insertion Loss (Voltage)	6% maximum @ 60Hz
Efficiency	>98%
Altitude Without Derating	3,300 feet above sea level
Maximum Motor Lead Length	15,000 feet
Relative Humidity	0% to 95% non-condensing
Current Rating	100% RMS continuous; 150% for 1 minute intermittent

Final product specifications subject to change at anytime.

How to properly size your filter

- Determine voltage and frequency requirements
- Reference motor nameplate to determine motor HP or KW and Full Load Amps
- Verify motor meets inverter duty standards per NEMA MG1 Section 31

- **Select filter based on Motor Full Load Amps**

Do not exceed filter's maximum current rating (amps)

- **Specify enclosure style**

Open (No enclosure)

NEMA 1/2 (General Purpose Enclosure)

NEMA 3R (Outdoor Enclosure)

- **Determine derating requirements**

Reference Performance Specifications table on previous page as well as derating tables listed below:

Table 1: Drive Output Frequency Derating

Table 2: Altitude Derating Curve

Derating Curves:

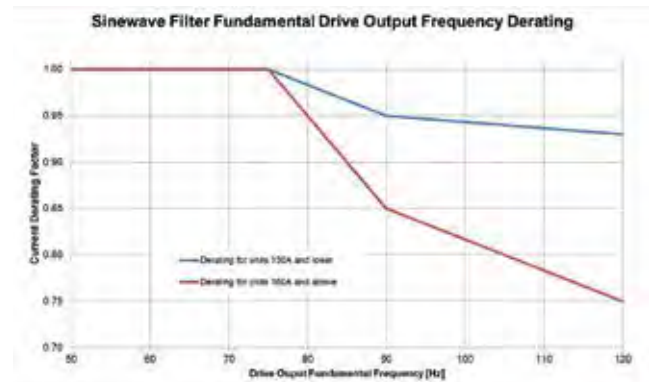


Table 1: Drive Output Frequency Derating

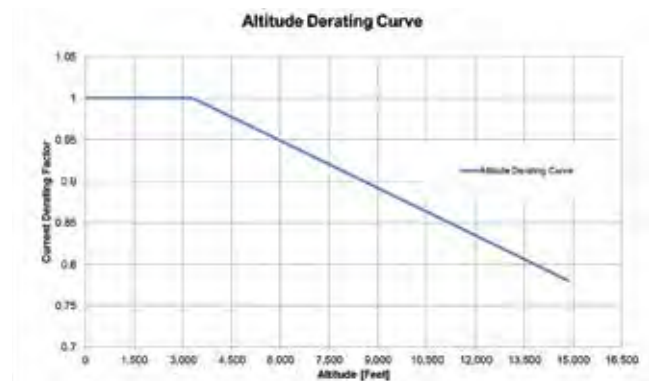


Table 2: Altitude Derating Curve

Understanding the SineWave Guardian™ Part Number:

SWG X _ _ _ _ X

SineWave Guardian™

Enclosure Type

M=Open Magnetics (No Enclosure)

G=General Purpose (NEMA 1/2)

W=Weather (NEMA 3R)

Current Rating

0002 is 2 Amps

0720 is 720 Amps

Voltage Frequency Code

D [380V - 480V]

SINEWAVE GUARDIAN™ SELECTION TABLES

380 - 480V 75Hz														
Motor (Ref Only)		Filter Amps Rating	MTE Part Number	Enclosure Type	Filter Dimensions (H x W x D)		Approx Weight		Ref Fig	Watts Loss	Capacitor/Capacitor Panel Assembly Dimensions (H x W x D)		Qty Req'd	Ref Fig
380V KW	480V HP				Inches	Millimeters	Lbs	Kgs			Inches	Millimeters		
0.55	0.75	2	SWG00002D	OPEN	4.9 x 4.4 x 2.6	124 x 112 x 66	5	2	7	25	7.5 x 3.0	191 x 76	1	1
			SWG00002D	NEMA 1/2	13.2 x 13.0 x 13.1	335 x 330 x 333	19	9	3		Preinstalled in cabinet			
			SWG00002D	NEMA 3R	24.0 x 12.5 x 22.9	610 x 318 x 582	62	28	5					
0.75	1.5	3	SWG00003D	OPEN	4.9 x 4.4 x 3.3	124 x 112 x 84	7	3	7	45	7.5 x 3.0	191 x 76	1	1
			SWG00003D	NEMA 1/2	13.2 x 13.0 x 13.1	335 x 330 x 333	21	10	3		Preinstalled in cabinet			
			SWG00003D	NEMA 3R	24.0 x 12.5 x 22.9	610 x 318 x 582	64	29	5					
2.2	3	5	SWG00005D	OPEN	6.6 x 8.0 x 4.8	168 x 203 x 122	11	5	7	75	7.5 x 3.0	191 x 76	1	1
			SWG00005D	NEMA 1/2	13.2 x 13.0 x 13.1	335 x 330 x 333	25	11	3		Preinstalled in cabinet			
			SWG00005D	NEMA 3R	24.0 x 12.5 x 22.9	610 x 318 x 582	68	31	5					
3	4	7	SWG00007D	OPEN	6.7 x 8.0 x 5.1	170 x 203 x 130	13	6	7	91	7.5 x 3.0	191 x 76	1	1
			SWG00007D	NEMA 1/2	13.2 x 13.0 x 13.1	335 x 330 x 333	27	12	3		Preinstalled in cabinet			
			SWG00007D	NEMA 3R	24.0 x 12.5 x 22.9	610 x 318 x 582	61	28	5					
4	5.5	9	SWG00009D	OPEN	6.7 x 8.0 x 5.1	170 x 203 x 130	14	6	7	97	7.5 x 3.0	191 x 76	1	1
			SWG00009D	NEMA 1/2	13.2 x 13.0 x 13.1	335 x 330 x 333	28	13	3		Preinstalled in cabinet			
			SWG00009D	NEMA 3R	24.0 x 12.5 x 22.9	610 x 318 x 582	54	24	5					
5.5	7.5	12	SWG00012D	OPEN	6.7 x 8.0 x 5.4	170 x 203 x 137	15	7	7	127	7.5 x 3.0	191 x 76	1	1
			SWG00012D	NEMA 1/2	13.2 x 13.0 x 13.1	335 x 330 x 333	29	13	3		Preinstalled in cabinet			
			SWG00012D	NEMA 3R	24.0 x 12.5 x 22.9	610 x 318 x 582	70	32	5					
7.5	10	17	SWG00017D	OPEN	7.5 x 9.0 x 4.8	191 x 229 x 122	20	9	7	130	7.5 x 3.0	191 x 76	1	1
			SWG00017D	NEMA 1/2	13.2 x 13.0 x 13.1	335 x 330 x 333	34	15	3		Preinstalled in cabinet			
			SWG00017D	NEMA 3R	24.0 x 12.5 x 22.9	610 x 318 x 582	76	34	5					
11	15	22	SWG00022D	OPEN	8.7 x 10.5 x 6.7	221 x 267 x 170	32	15	7	135	7.5 x 3.0	191 x 76	1	1
			SWG00022D	NEMA 1/2	24.0 x 17.0 x 18.5	610 x 432 x 470	79	36	4		Preinstalled in cabinet			
			SWG00022D	NEMA 3R	24.0 x 12.5 x 22.9	610 x 318 x 582	87	39	5					
-	20	27	SWG00027D	OPEN	8.7 x 10.5 x 6.7	221 x 267 x 170	35	16	8	140	7.5 x 3.0	191 x 76	1	1
			SWG00027D	NEMA 1/2	24.0 x 17.0 x 18.5	610 x 432 x 470	82	37	4		Preinstalled in cabinet			
			SWG00027D	NEMA 3R	24.0 x 12.5 x 22.9	610 x 318 x 582	90	41	5					
18.5	25	35	SWG00035D	OPEN	8.9 x 10.5 x 6.7	226 x 267 x 170	39	18	8	210	7.5 x 3.9	191 x 99	1	1
			SWG00035D	NEMA 1/2	24.0 x 17.0 x 18.5	610 x 432 x 470	87	39	4		Preinstalled in cabinet			
			SWG00035D	NEMA 3R	24.0 x 12.5 x 22.9	610 x 318 x 582	94	43	5					
22	30	45	SWG00045D	OPEN	8.8 x 10.5 x 7.2	224 x 267 x 183	40	18	8	225	7.5 x 3.9	191 x 99	1	1
			SWG00045D	NEMA 1/2	24.0 x 17.0 x 18.5	610 x 432 x 470	90	41	4		Preinstalled in cabinet			
			SWG00045D	NEMA 3R	24.0 x 12.5 x 22.9	610 x 318 x 582	98	44	5					
-	40	55	SWG00055D	OPEN	8.8 x 10.5 x 6.7	224 x 267 x 170	54	24	9	301	8.0 x 3.9	203 x 99	1	1
			SWG00055D	NEMA 1/2	24.0 x 17.0 x 18.5	610 x 432 x 470	101	46	4		Preinstalled in cabinet			
			SWG00055D	NEMA 3R	24.0 x 12.5 x 22.9	610 x 318 x 582	109	49	5					
30	50	65	SWG00065D	OPEN	10.7 x 12.0 x 8.6	272 x 305 x 218	59	27	9	310	8.0 x 3.9	203 x 99	1	1
			SWG00065D	NEMA 1/2	33.9 x 18.3 x 20.9	861 x 465 x 531	136	62	6		Preinstalled in cabinet			
			SWG00065D	NEMA 3R	33.9 x 18.3 x 26.0	861 x 465 x 660	143	65						
37	60	80	SWG00080D	OPEN	10.8 x 12.0 x 9.0	274 x 305 x 229	75	34	9	387	8.3 x 4.6	211 x 117	1	1
			SWG00080D	NEMA 1/2	33.9 x 18.3 x 20.9	861 x 465 x 531	150	68	6		Preinstalled in cabinet			
			SWG00080D	NEMA 3R	33.9 x 18.3 x 26.0	861 x 465 x 660	157	71						
55	75	110	SWG00110D	OPEN	10.7 x 12.0 x 10.5	272 x 305 x 267	105	48	9	395	8.3 x 4.6	211 x 117	1	1
			SWG00110D	NEMA 1/2	33.9 x 18.3 x 20.9	861 x 465 x 531	180	82	6		Preinstalled in cabinet			
			SWG00110D	NEMA 3R	33.9 x 18.3 x 26.0	861 x 465 x 660	187	85						

Note: Weights and dimensions are for reference only. Please visit mtecorp.com for detailed information.

380 - 480V 75Hz

Motor (Ref Only)		Filter Amps Rating	MTE Part Number	Enclosure Type	Filter Dimensions (H x W x D)		Approx Weight		Ref Fig	Watts Loss	Capacitor/Capacitor Panel Assembly Dimensions (H x W x D)		Qty Req'd	Ref Fig
380V KW	480V HP				Inches	Millimeters	Lbs	Kgs			Inches	Millimeters		
-	100	130	SWGM0130D	OPEN	10.7 x 12.0 x 11.5	272 x 305 x 292	108	49	10	420	8.3 x 4.6	211 x 117	1	1
			SWGG0130D	NEMA 1/2	33.9 x 18.3 x 20.9	861 x 465 x 531	182	83	6		Preinstalled in cabinet			
			SWG0130D	NEMA 3R	33.9 x 18.3 x 26.0	861 x 465 x 660	189	86			Preinstalled in cabinet			
75	125	160	SWGM0160D	OPEN	14.5 x 15.3 x 11.3	368 x 389 x 287	160	73	10	595	6.7 x 16.4 x 7.6	170 x 417 x 193	1	2
			SWGG0160D	NEMA 1/2	51.3 x 27.7 x 24.9	1303 x 704 x 632	327	148	6		Preinstalled in cabinet			
			SWG0160D	NEMA 3R	51.3 x 27.7 x 30.0	1303 x 704 x 762	340	154			Preinstalled in cabinet			
110	150	200	SWGM0200D	OPEN	14.5 x 15.3 x 14.8	368 x 389 x 376	166	75	10	650	6.7 x 16.4 x 7.6	170 x 417 x 193	1	2
			SWGG0200D	NEMA 1/2	51.3 x 27.7 x 24.9	1303 x 704 x 632	336	152	6		Preinstalled in cabinet			
			SWG0200D	NEMA 3R	51.3 x 27.7 x 30.0	1303 x 704 x 762	349	158			Preinstalled in cabinet			
132	200	250	SWGM0250D	OPEN	14.5 x 15.3 x 13.8	368 x 389 x 351	220	100	10	775	6.9 x 16.3 x 7.6	175 x 414 x 193	1	2
			SWGG0250D	NEMA 1/2	51.3 x 27.7 x 24.9	1303 x 704 x 632	381	173	6		Preinstalled in cabinet			
			SWG0250D	NEMA 3R	51.3 x 27.7 x 30.0	1303 x 704 x 762	395	179			Preinstalled in cabinet			
160	250	305	SWGM0305D	OPEN	14.6 x 15.3 x 14.8	371 x 389 x 376	260	118	11	945	7.4 x 16.4 x 7.6	188 x 417 x 193	1	2
			SWGG0305D	NEMA 1/2	51.3 x 27.7 x 24.9	1303 x 704 x 632	430	195	6		Preinstalled in cabinet			
			SWG0305D	NEMA 3R	51.3 x 27.7 x 30.0	1303 x 704 x 762	443	201			Preinstalled in cabinet			
200	300	365	SWGM0365D	OPEN	14.6 x 15.3 x 15.2	371 x 389 x 386	310	141	11	1,050	8.3 x 16.4 x 7.6	211 x 417 x 193	1	2
			SWGG0365D	NEMA 1/2	51.3 x 27.7 x 24.9	1303 x 704 x 632	480	218	6		Preinstalled in cabinet			
			SWG0365D	NEMA 3R	51.3 x 27.7 x 30.0	1303 x 704 x 762	493	224			Preinstalled in cabinet			
220	350	415	SWGM0415D	OPEN	14.6 x 15.3 x 15.2	371 x 389 x 386	326	148	11	1,137	8.3 x 16.4 x 7.6	211 x 417 x 193	1	2
			SWGG0415D	NEMA 1/2	51.3 x 27.7 x 24.9	1303 x 704 x 632	496	225	6		Preinstalled in cabinet			
			SWG0415D	NEMA 3R	51.3 x 27.7 x 30.0	1303 x 704 x 762	509	231			Preinstalled in cabinet			
280	450	515	SWGM0515D	OPEN	15.0 x 15.3 x 16.2	381 x 389 x 411	355	161	12	1,235	9.9 x 16.4 x 7.6	251 x 417 x 193	1	2
			SWGG0515D	NEMA 1/2	87.6 x 43.7 x 31.1	2225 x 1110 x 790	764	347	6		Preinstalled in cabinet			
			SWG0515D	NEMA 3R	87.6 x 43.7 x 40.1	2225 x 1110 x 1019	800	363			Preinstalled in cabinet			
335	500	600	SWGM0600D	OPEN	18.3 x 24.0 x 14.6	465 x 610 x 371	483	219	12	2,225	9.9 x 16.4 x 7.6	251 x 417 x 193	1	2
			SWGG0600D	NEMA 1/2	87.6 x 43.7 x 31.1	2225 x 1110 x 790	896	406	6		Preinstalled in cabinet			
			SWG0600D	NEMA 3R	87.6 x 43.7 x 40.1	2225 x 1110 x 1019	932	423			Preinstalled in cabinet			
375	600	720	SWGM0720D	OPEN	18.2 x 24.0 x 17.5	462 x 610 x 445	711	323	12	2,300	8.3 x 16.4 x 7.6	211 x 417 x 193	1	2
			SWGG0720D	NEMA 1/2	87.6 x 43.7 x 31.1	2225 x 1110 x 790	1,127	511	6		9.9 x 16.4 x 7.6	251 x 417 x 193	1	
			SWG0720D	NEMA 3R	87.6 x 43.7 x 40.1	2225 x 1110 x 1019	1,164	528			Preinstalled in cabinet			
450	700	850	SWGM0850D	OPEN	18.2 x 24.0 x 19.0	462 x 610 x 483	835	379	12	2,556	7.7 x 16.4 x 7.6	196 x 417 x 193	1	2
			SWGG0850D	NEMA 1/2	84.0 x 52.0 x 36.5	2134 x 1321 x 927	1,470	667	6		9.9 x 16.4 x 7.6	251 x 417 x 193	2	
			SWG0850D	NEMA 3R	84.0 x 52.0 x 45.5	2134 x 1321 x 1156	1,511	685			Preinstalled in cabinet			
560	850	1000	SWGM1000D	OPEN	18.1 x 24.0 x 20.6	460 x 610 x 523	942	427	12	2,850	7.4 x 16.4 x 7.6	188 x 417 x 193	1	2
			SWGG1000D	NEMA 1/2	84.0 x 52.0 x 36.5	2134 x 1321 x 927	1,580	717	6		9.9 x 16.4 x 7.6	251 x 417 x 193	2	
			SWG1000D	NEMA 3R	84.0 x 52.0 x 45.5	2134 x 1321 x 1156	1,621	735			Preinstalled in cabinet			
675	1000	1200	SWGM1200D	OPEN	25.7 x 24.0 x 20.3	653 x 610 x 516	1,272	577	13	3,000	9.9 x 16.4 x 7.6	251 x 416.6 x 193	3	2
			SWGG1200D	NEMA 1/2	84.0 x 52.0 x 36.5	2134 x 1321 x 927	1,921	871	6		Preinstalled in cabinet			
			SWG1200D	NEMA 3R	84.0 x 52.0 x 45.5	2134 x 1321 x 1156	1,962	890			Preinstalled in cabinet			
800	1200	1500	SWGM1500D	OPEN	25.9 x 24.0 x 20.0	658 x 610 x 508	1,296	588	13	3,210	9.9 x 16.4 x 7.6	251 x 417 x 193	3	2
			SWGG1500D	NEMA 1/2	84.0 x 52.0 x 36.5	2134 x 1321 x 927	1,945	882	6		Preinstalled in cabinet			
			SWG1500D	NEMA 3R	84.0 x 52.0 x 45.5	2134 x 1321 x 1156	1,986	901			Preinstalled in cabinet			

Note: Weights and dimensions are for reference only. Please visit mtecorp.com for detailed information.

REFERENCE FIGURES

3-PHASE CAPACITOR

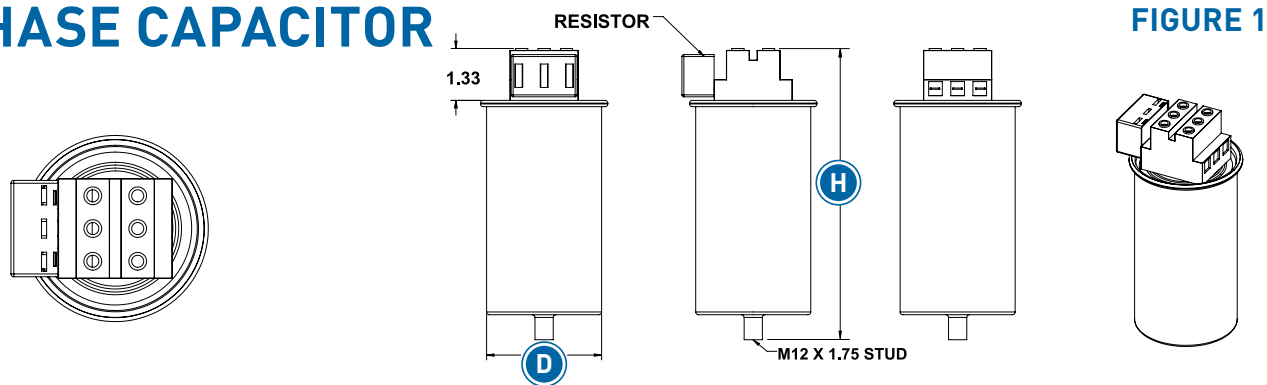


FIGURE 1

CAPACITOR PANEL

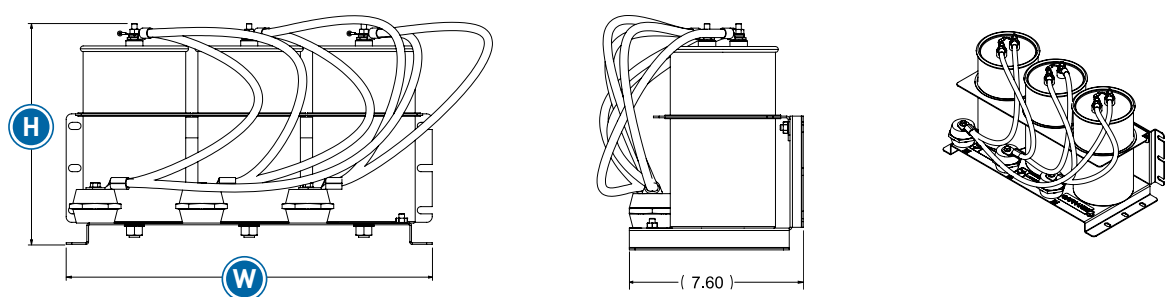


FIGURE 2

ENCLOSURES

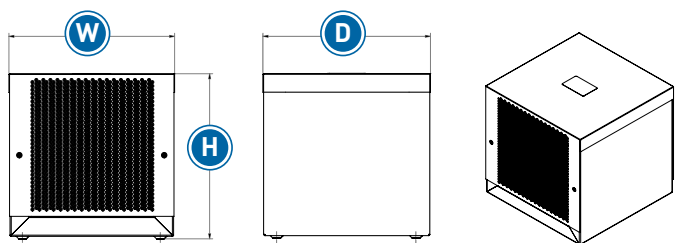


FIGURE 3

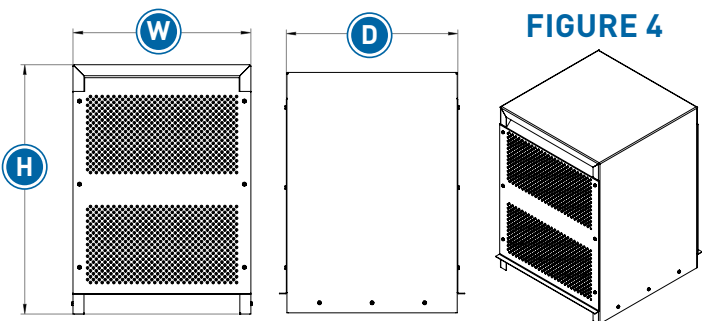
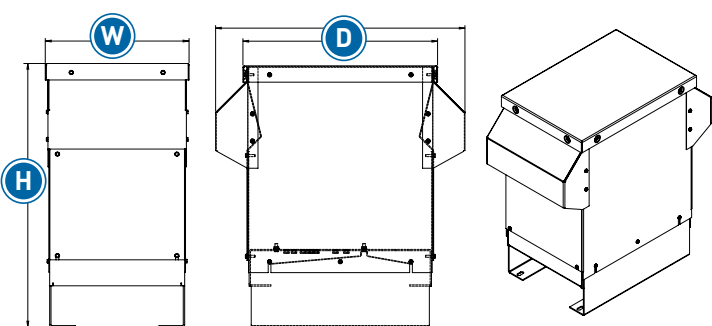
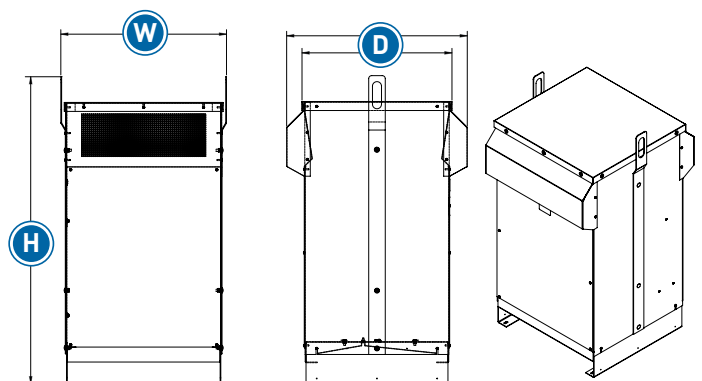


FIGURE 4



NOTE: HOODS ONLY ON NEMA 3R ENCLOSURES

FIGURE 5



NOTE: HOODS ONLY ON NEMA 3R ENCLOSURES

FIGURE 6

OPEN MAGNETICS

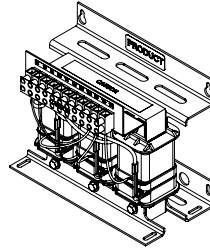
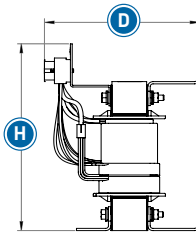
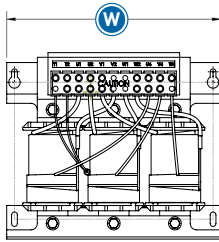


FIGURE 7

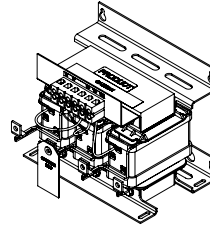
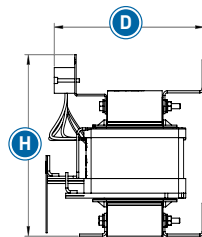
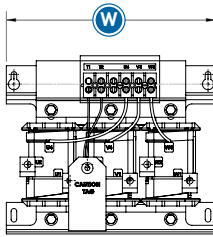


FIGURE 8

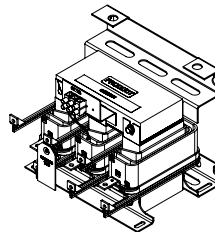
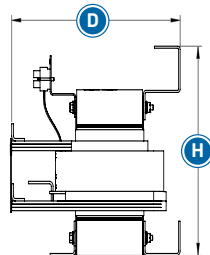
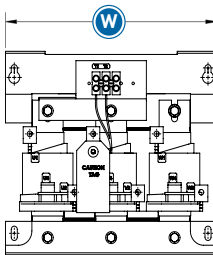


FIGURE 9

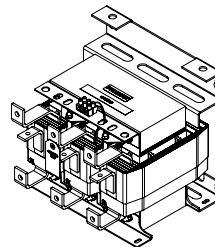
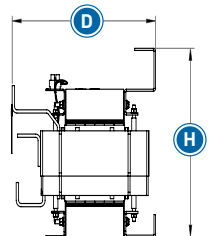
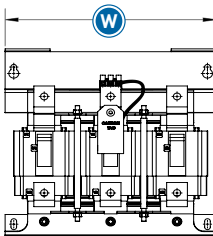


FIGURE 10

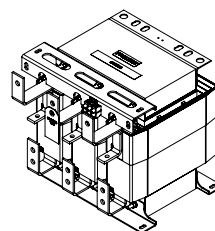
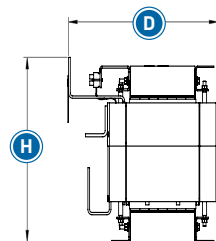
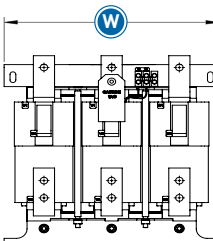


FIGURE 11

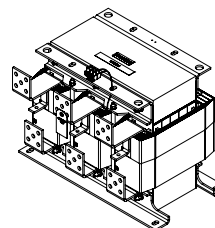
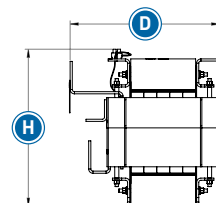
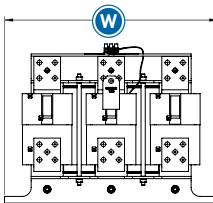


FIGURE 12



Motor Protection Filters

dV Sentry™

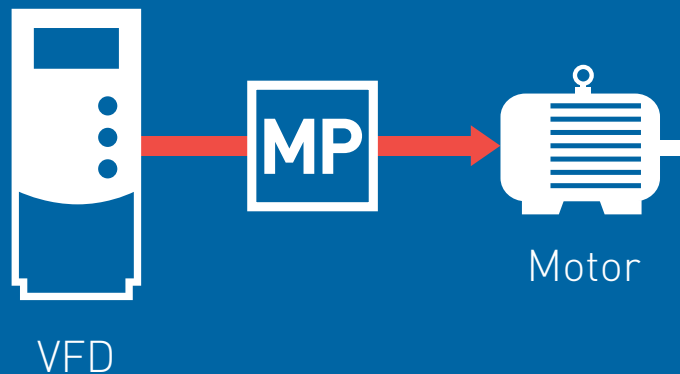
Next generation dV/dt Filters for motor protection

SineWave Guardian™

Best-in-class SineWave Filter for cleaning PWM waveforms out to 15,000 ft

High Frequency SineWave Guardian™

The optimized motor protection solution for high frequency motors



High Frequency SineWave Guardian™

Optimized for
High Frequency
Motors

Product Selector



- **Increases motor life**
- **Easy to integrate, install and service**
- **Operates in high ambient temperatures**
- **High performance and reliability**
- **Three-year warranty**

If you're not leading, you're following. Innovation is here.

At MTE, we have found a way to make our best-in-class motor protection solution, the SineWave Guardian™ Filter, even better. Featuring the same unequalled performance, the market leading High Frequency SineWave Guardian™ uses innovative technology to optimize protection for high frequency motors. Our new filter features reduced voltage drop and virtually eliminates voltage distortion (THVD) generated by Variable Frequency Drives (VFDs). This results in reduced losses, protection against overheating motors, and ultimately providing less downtime. It can protect motors in some of the harshest conditions, with unmatched reliability and durability. The High Frequency SineWave Guardian™ Filter is the optimized motor protection solution for high frequency motors, exclusively by MTE.

Specially designed for high frequency motors to reduce voltage distortion, improve efficiency, and extend motor life.

High Frequency SineWave Guardian™ Filters transform the output of Variable Frequency Drives (VFDs) to a near perfect sinusoidal waveform for the best level of protection for high frequency motors. MTE's unique, patent-pending design comes in a smaller size than traditional LC Filters, and offers higher performance and better efficiency.

Increase motor life

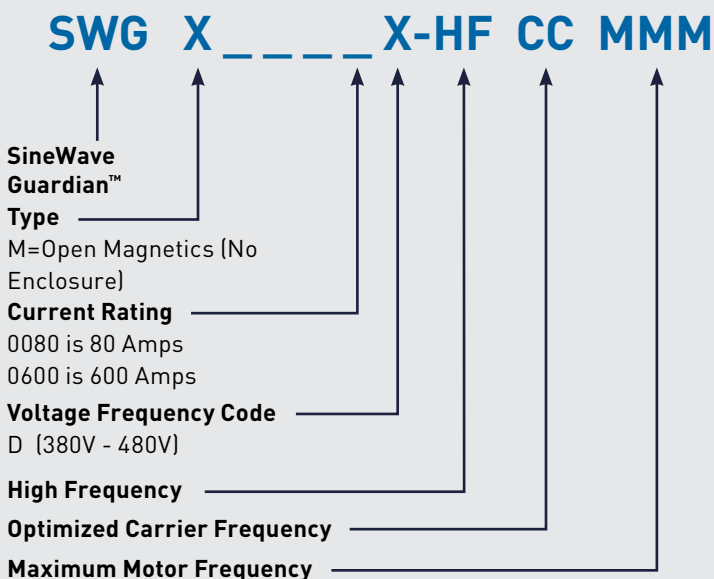
Reduce motor audible noise

Reduce radiated emissions

How to properly size your filter

- **Determine voltage and frequency requirements**
- **Reference motor nameplate to determine motor HP or KW and Full Load Amps**
- **Verify motor meets inverter duty standards per NEMA MG1 Section 31**
- **Select filter based on Motor Full Load Amps**
Do not exceed filter's maximum current rating (amps)
- **Determine derating requirements**
Reference Performance Specifications table

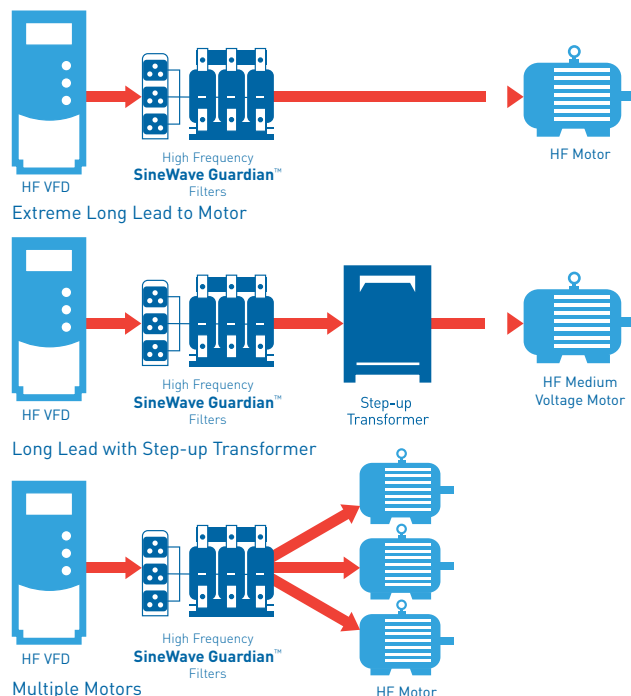
Understanding the High Frequency SineWave Guardian™ Part Number:



High Frequency SineWave Guardian™



Application Configurations:



Performance Specifications

Service Load Condition	Conventional 3 phase motors operating in volts per hertz mode, standard step-up transformer or design for use of filter in sensor less vector mode
Input Voltage	380V - 480V +/- 10%
Harmonic Voltage Distortion	5% maximum @ 5kHz; 8% maximum @ 6-8 kHz
Inverter Switching Frequency	4.8kHz to 8kHz
Inverter Operating Frequency	6Hz to 300Hz
Maximum Ambient Temperature	-40C to +60C modular filter; -40C to +90C storage
Insertion Loss (Voltage)	6% maximum @ 150Hz; 12% maximum @ 300Hz
Efficiency	>99%
Altitude Without Derating	3,300 feet above sea level
Maximum Motor Lead Length	15,000 feet
Relative Humidity	0% to 95% non-condensing
Current Rating	100% RMS continuous; 150% for 1 minute intermittent

Final product specifications subject to change at anytime.

380-480V 300Hz

Motor (Ref Only)		Filter Amps Rating	MTE Part Number	Enclosure Type	Filter Dimensions (H x W x D)		Approx Weight		Ref Fig	Watts Loss	Capacitor/Capacitor Panel Assembly Dimensions (H x W x D)		Qty Req'd	Ref Fig
					Inches	Millimeters	Lbs	Kgs			Inches	Millimeters		
37	60	80	SWGM0080D-HF05300	OPEN	10.5 x 12.0 x 9.1	267 x 305 x 231	62	28	1	360	5.8 x 16.3 x 7.6	147 x 414 x 193	1	4
55	75	110	SWGM0110D-HF05300	OPEN	10.1 x 12.0 x 10.1	257 x 305 x 257	78	35	1	451	5.8 x 16.3 x 7.6	147 x 414 x 193	1	4
-	100	130	SWGM0130D-HF05300	OPEN	10.2 x 12.0 x 11.5	259 x 305 x 292	92	42	1	504	5.8 x 16.3 x 7.6	147 x 414 x 193	1	4
75	125	160	SWGM0160D-HF05300	OPEN	10.0 x 12.0 x 11.6	254 x 305 x 295	96	44	1	563	5.8 x 16.3 x 7.6	147 x 414 x 193	1	4
110	150	200	SWGM0200D-HF05300	OPEN	12.1 x 15.3 x 11.2	307 x 389 x 284	136	62	2	718	6.7 x 16.3 x 7.6	170 x 414 x 193	1	4
132	200	250	SWGM0250D-HF05300	OPEN	12.3 x 15.3 x 11.3	312 x 389 x 287	143	65	2	911	6.7 x 16.3 x 7.6	170 x 414 x 193	1	4
160	250	305	SWGM0305D-HF05300	OPEN	12.4 x 15.3 x 12.6	315 x 389 x 320	174	79	2	958	6.7 x 16.3 x 7.6	170 x 414 x 193	1	4
220	350	415	SWGM0415D-HF05300	OPEN	12.3 x 15.3 x 14.3	312 x 389 x 363	244	111	2	1,144	6.7 x 16.3 x 7.6	170 x 414 x 193	2	4
280	450	515	SWGM0515D-HF05300	OPEN	14.2 x 15.3 x 13.1	361 x 389 x 333	258	117	3	1,250	6.7 x 16.3 x 7.6	170 x 414 x 193	1	4
											6.7 x 16.3 x 7.6	170 x 414 x 193	2	4
335	500	600	SWGM0600D-HF05300	OPEN	14.3 x 15.3 x 14.3	363 x 389 x 363	306	139	3	1,321	6.7 x 16.3 x 7.6	170 x 414 x 193	1	4
											6.7 x 16.3 x 7.6	170 x 414 x 193	2	4

Note: Weights and dimensions are for reference only. Please visit mtecorp.com for detailed information.

FIGURE 1

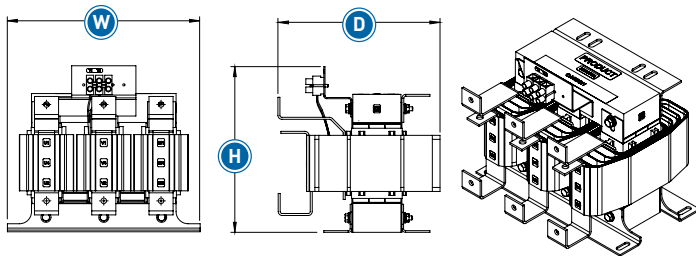


FIGURE 2

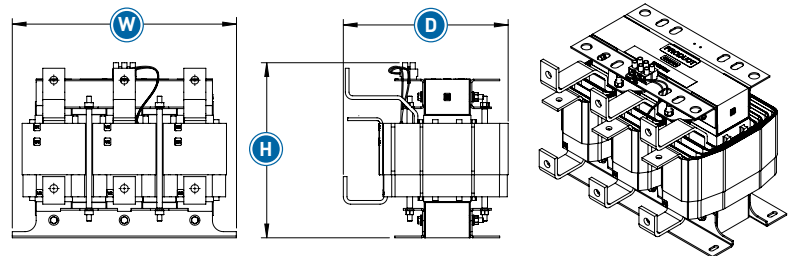


FIGURE 3

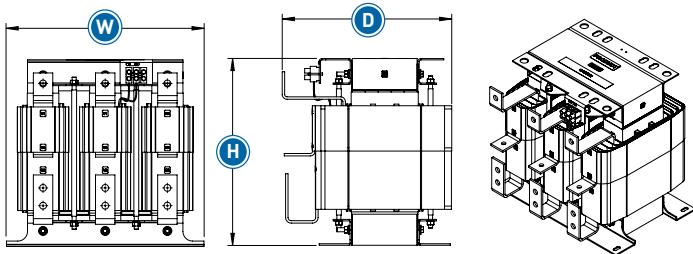
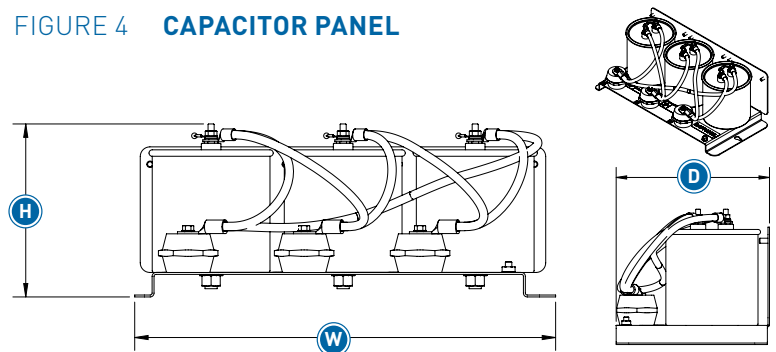


FIGURE 4 CAPACITOR PANEL



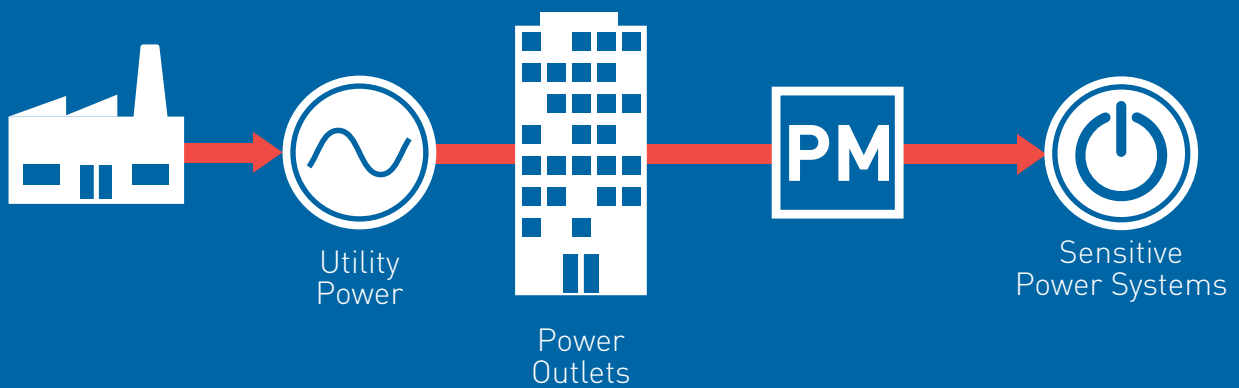
Note: Figure illustrations are for reference only. Actual hardware may differ. Please visit mtecorp.com for detailed information.



Power Management

RF EMI Filters

An economical solution to facility interference problems caused by RF emissions



Type RF EMI/RFI

Product Selector



- **Meet EMC Directives (Class A) and FCC limits for conducted noise emissions**
- **Reduce common mode and differential mode noise emissions**
- **Protect sensitive loads from EMI/RFI**
- **Use on input side of a VFD or inverter**

The quiet solution to noise issues.

Our Type RF Electromagnetic Interference (EMI) and Radio Frequency Interference (RFI) filters are designed to help your system meet Electromagnetic Compatibility (EMC) requirements. They provide sufficient attenuation of the conducted EMI and RFI associated with Variable Frequency Drives (VFDs) and inverter applications. Typically used with AC and DC Motor drives, Uninterruptible Power Supplies, and Active Harmonic Filters, the Type RF EMI/RFI filters provide an economical solution to facility interference problems caused by RF emissions.

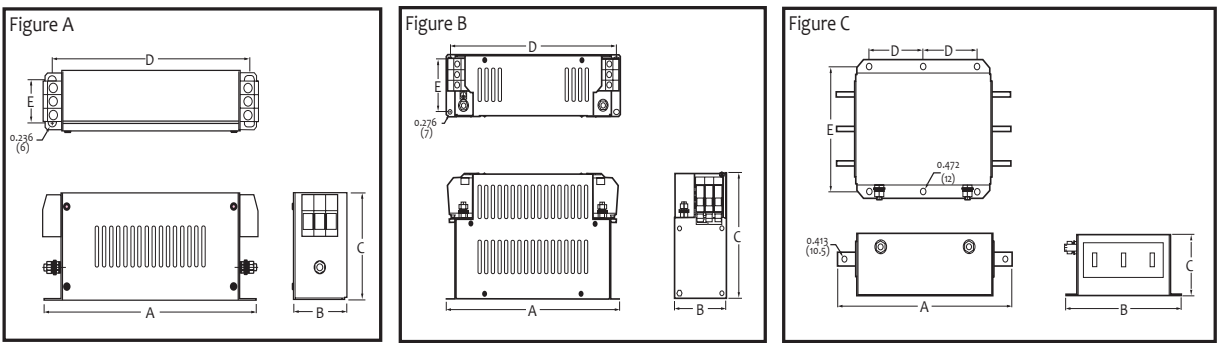
Say goodbye to voltage distortion and electrical noise caused by RF emissions with the Type RF EMI/RFI filter from MTE.

Solve electrical noise problems and protect
your sensitive loads with Type RF EMI/RFI Filters.

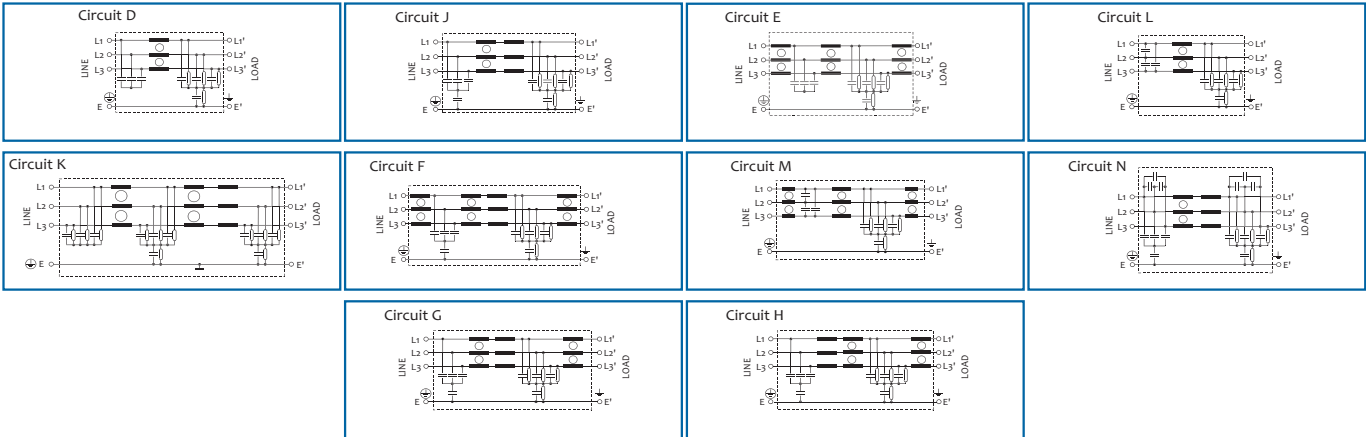
MTE Part Number	Ref Fig	Circuit Fig	Rated Amps	SCCR Rating	A (in)	A (mm)	B (in)	B (mm)	C (in)	C (mm)	D (in)	D (mm)	E (in)	E (mm)	Weight (lbs)	Mass (kg)	Diss. Watts	Max Wired Size AWG (mm ²)	Leakage Current (mA)
480V 50/60Hz																			
RF3-0006-4	A	D	6	5	7.0	179	1.8	45	3.1	79	6.57	167	1.26	32	1.4	0.65	3.5	11 (4)	3.3
RF3-0010-4	A	D	10	5	7.0	179	1.8	45	3.1	79	6.57	167	1.26	32	1.5	0.7	4.2	11 (4)	3.1
RF3-0018-4	A	D	18	5	9.0	229	2.2	55	4.5	114	8.54	217	1.65	42	2.4	1.1	11	7 (10)	3.3
RF3-0025-4	A	E	25	5	9.0	229	2.2	55	4.5	114	8.54	217	1.65	42	2.9	1.3	11	7 (10)	6.3
RF3-0033-4	B	F	33	5	10.7	272	2.9	74	6.3	161	10.16	258	2.36	60	6.0	2.7	16	7 (10)	8.1
RF3-0050-4	B	F	50	5	12.3	312	3.7	93	7.5	190	11.73	298	3.11	79	8.2	3.7	16	1 (35)	10.5
RF3-0070-4	B	F	70	10	12.3	213	3.7	93	7.5	190	11.73	298	3.11	79	9.3	4.2	19	1 (35)	9.8
RF3-0090-4	B	G	90	10	12.6	319	5.0	126	8.8	224	11.73	298	3.11	79	13.5	6.1	18	1 (35)	19.7
RF3-0130-4	B	H	130	18	12.6	319	5.0	126	8.8	224	11.73	298	4.41	112	13.5	6.1	25	000 (70)	21.7
RF3-0150-4	B	J	150	18	13.1	334	5.0	126	8.8	224	11.73	298	4.41	112	19.6	8.9	28	0000 (95)	27.6
RF3-0330-4	C	K	330	30	15.2	386	10.2	260	4.6	116	4.72	120	9.25	235	24.3	11	40	N/A	7.2
600V 50/60Hz																			
RF3-0006-6	A	L	6	5	7.2	183	1.8	45	3.1	79	6.57	167	1.26	32	1.4	0.65	3.5	9 (6)	2.9
RF3-0010-6	A	L	10	5	7.2	183	1.8	45	3.1	79	6.57	167	1.26	32	1.5	0.7	4.2	9 (6)	2.9
RF3-0018-6	A	L	18	5	9.2	233	2.2	55	4.5	114	8.54	217	1.65	42	2.4	1.1	11	9 (6)	9.6
RF3-0025-6	A	M	25	5	9.2	233	2.2	55	4.5	114	8.54	217	1.65	42	2.9	1.3	11	9 (6)	9.6
RF3-0033-6	B	F	33	5	10.7	272	2.9	74	6.3	161	10.16	258	2.36	60	6.0	2.7	16	7 (10)	12.6
RF3-0050-6	B	F	50	10	12.3	312	3.7	93	7.5	190	11.73	298	3.11	79	8.2	3.7	16	1 (35)	13.2
RF3-0070-6	B	F	70	10	12.3	312	3.7	93	7.5	190	11.73	298	3.11	79	9.3	4.2	19	1 (35)	19.2
RF3-0090-6	B	G	90	10	12.3	312	3.7	93	8.8	224	11.73	298	3.11	79	9.3	4.2	19	1 (35)	27.5
RF3-0130-6	B	N	130	18	13.1	334	5.0	126	8.8	224	11.73	298	4.41	112	19.3	8.9	28	000 (70)	27.5
RF3-0150-6	B	N	150	18	13.1	334	5.0	126	8.8	224	11.73	298	4.41	112	19.6	8.9	28	0000 (95)	27.5
RF3-0330-6	C	K	330	30	15.2	386	10.2	260	4.6	116	4.72	120	9.25	235	24.3	11	40	N/A	19.2

Note: Weights and dimensions are for reference only. Please visit mtecorp.com for detailed information.

REF FIGURES



CIRCUIT FIGURES



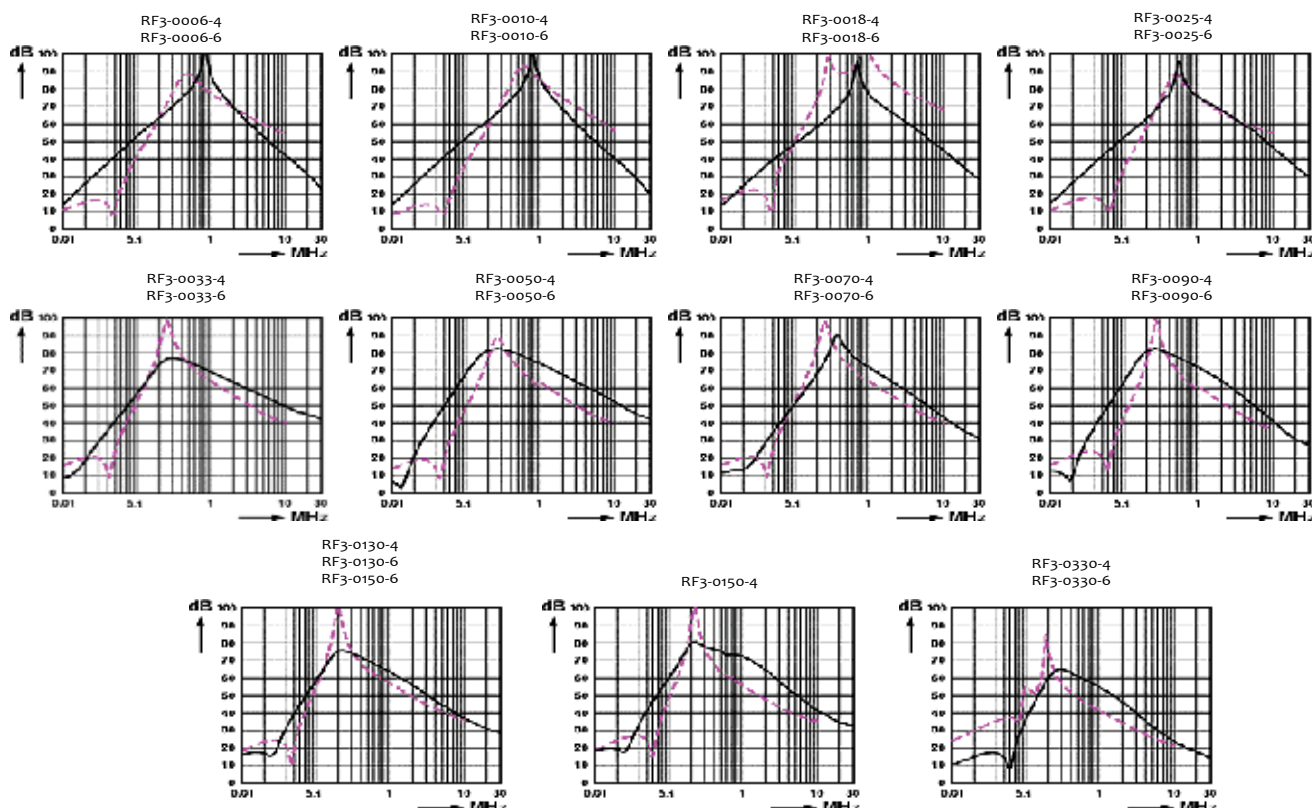
HP	kW	Installation WITHOUT an Input Line Reactor						HP	kW	Installation WITH an Input Line Reactor (≥ 3% Impedance)					
		208V	240V	380V	400V/415V	480V	600V			208V	240V	380V	400V/415V	480V	600V
1	0.75	RF3-0006-4	RF3-0006-4	RF3-0006-4	RF3-0006-4	RF3-0006-4	RF3-0006-6	1	0.75	RF3-0006-4	RF3-0006-4	RF3-0006-4	RF3-0006-4	RF3-0006-4	RF3-0006-6
1.5	1.12	RF3-0010-4	RF3-0010-4	RF3-0006-4	RF3-0006-4	RF3-0006-4	RF3-0006-6	1.5	1.12	RF3-0006-4	RF3-0006-4	RF3-0006-4	RF3-0006-4	RF3-0006-4	RF3-0006-6
2	1.5	RF3-0018-4	RF3-0010-4	RF3-0006-4	RF3-0006-4	RF3-0006-4	RF3-0006-6	2	1.5	RF3-0010-4	RF3-0010-4	RF3-0006-4	RF3-0006-4	RF3-0006-4	RF3-0006-6
3	2.2	RF3-0018-4	RF3-0018-4	RF3-0010-4	RF3-0010-4	RF3-0010-4	RF3-0006-6	3	2.2	RF3-0018-4	RF3-0010-4	RF3-0010-4	RF3-0006-4	RF3-0006-4	RF3-0006-6
5	3.7	RF3-0025-4	RF3-0025-4	RF3-0018-4	RF3-0018-4	RF3-0010-4	RF3-0010-6	5	3.7	RF3-0018-4	RF3-0018-4	RF3-0010-4	RF3-0010-4	RF3-0010-4	RF3-0006-6
7.5	5.5	RF3-0033-4	RF3-0033-4	RF3-0018-4	RF3-0018-4	RF3-0018-4	RF3-0018-6	7.5	5.5	RF3-0025-4	RF3-0025-4	RF3-0018-4	RF3-0018-4	RF3-0018-4	RF3-0010-6
10	7.5	RF3-0050-4	RF3-0050-4	RF3-0025-4	RF3-0025-4	RF3-0025-4	RF3-0018-6	10	7.5	RF3-0033-4	RF3-0033-4	RF3-0018-4	RF3-0018-4	RF3-0018-4	RF3-0018-6
15	11.25	RF3-0070-4	RF3-0070-4	RF3-0050-4	RF3-0033-4	RF3-0033-4	RF3-0025-6	15	11.25	RF3-0050-4	RF3-0050-4	RF3-0025-4	RF3-0025-4	RF3-0025-4	RF3-0018-6
20	15	RF3-0090-4	RF3-0090-4	RF3-0050-4	RF3-0050-4	RF3-0050-4	RF3-0033-6	20	15	RF3-0070-4	RF3-0070-4	RF3-0033-4	RF3-0033-4	RF3-0033-4	RF3-0025-6
25	18.5	RF3-0130-4	RF3-0130-4	RF3-0070-4	RF3-0050-4	RF3-0050-4	RF3-0050-6	25	18.5	RF3-0090-4	RF3-0090-4	RF3-0050-4	RF3-0050-4	RF3-0050-4	RF3-0033-6
30	22.5	RF3-0130-4	RF3-0130-4	RF3-0070-4	RF3-0070-4	RF3-0070-4	RF3-0050-6	30	22.5	RF3-0130-4	RF3-0090-4	RF3-0070-4	RF3-0050-4	RF3-0050-4	RF3-0033-6
40	30	RF3-0330-4	RF3-0150-4	RF3-0090-4	RF3-0090-4	RF3-0090-4	RF3-0070-6	40	30	RF3-0130-4	RF3-0130-4	RF3-0070-4	RF3-0070-4	RF3-0070-4	RF3-0050-6
50	37.5	RF3-0330-4	RF3-0330-4	RF3-0130-4	RF3-0130-4	RF3-0090-4	RF3-0070-6	50	37.5	RF3-0150-4	RF3-0150-4	RF3-0090-4	RF3-0090-4	RF3-0070-4	RF3-0070-6
60	45	RF3-0330-4	RF3-0330-4	RF3-0130-4	RF3-0130-4	RF3-0130-4	RF3-0090-6	60	45	RF3-0330-4	RF3-0330-4	RF3-0130-4	RF3-0090-4	RF3-0090-4	RF3-0070-6
75	56.3	RF3-0330-4	RF3-0330-4	RF3-0330-4	RF3-0150-4	RF3-0150-4	RF3-0130-6	75	56.3	RF3-0330-4	RF3-0330-4	RF3-0130-4	RF3-0130-4	RF3-0130-4	RF3-0090-6
100	75	--	RF3-0330-4	RF3-0330-4	RF3-0330-4	RF3-0330-4	RF3-0130-6	100	75	RF3-0330-4	RF3-0330-4	RF3-0330-4	RF3-0150-4	RF3-0130-4	RF3-0130-6
125	93.8	--	--	RF3-0330-4	RF3-0330-4	RF3-0330-4	RF3-0330-6	125	93.8	--	RF3-0330-4	RF3-0330-4	RF3-0330-4	RF3-0330-4	RF3-0130-6
150	112.5	--	--	RF3-0330-4	RF3-0330-4	RF3-0330-4	RF3-0330-6	150	112.5	--	--	RF3-0330-4	RF3-0330-4	RF3-0330-4	RF3-0150-6
200	150	--	--	--	--	RF3-0330-4	RF3-0330-6	200	150	--	--	RF3-0330-4	RF3-0330-4	RF3-0330-4	RF3-0330-6
250	187.5	--	--	--	--	--	--	250	187.5	--	--	--	--	RF3-0330-4	RF3-0330-6
300	225	--	--	--	--	--	--	300	225	--	--	--	--	--	RF3-0330-6

Note: Higher ratings may be accomplished by connecting two or more filters in parallel. Please visit mtecorp.com for detailed information.

Insertion Loss - Insertion loss data illustrates the typical reduction of both common mode and differential mode noise (based on the standard test circuit). Common mode noise occurs between a phase or neutral conductor and ground, while differential mode noise occurs between phase conductors or between phase and neutral conductors.

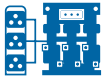
6A to 330A Rated

Common Mode —————
Differential Mode - - - - -



Our Products

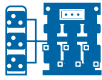
HF



Matrix® AP

The Matrix® AP is the most advanced passive filter on the market to meet IEEE-519. Its patented Adaptive Passive Technology adapts to varying loads to virtually eliminate harmonics.

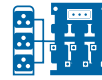
HF



Matrix® ONE

Matrix® ONE single phase filters are optimized to work in remote and rural areas where three phase power is not available.

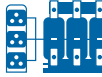
HF



Matrix® APAX

Matrix® APAX provides an easy and affordable solution that helps reduce harmful side effects caused by harmonics.

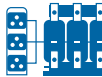
MP



High Frequency SineWave Guardian™

The High Frequency SineWave Guardian™ is the market leading filter for protecting high frequency motors with its innovative technology and unequalled performance.

MP



SineWave Guardian™

This best-in-class filter cleans up the PWM waveforms generated by VFDs. It virtually eliminates high frequency content and voltage peaks to reduce motor downtime.

MP



dV Sentry™

The dV Sentry™ and its patented Triple Defense Core is proven to reduce common mode, protect against peak voltage, and reduce rise time – all in one unit.

RZ



RL Reactors

The RL family of line and load reactors is unequalled in absorbing power line disturbances to reduce nuisance tripping, reduce harmonic distortion, and minimize long lead effects.

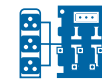
RZ



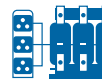
RLW Reactors

The RLW family of line and load reactors provides an engineered solution to protect electrical systems against harmful and annoying power distortions.

HF



MP



RZ



Custom Power Quality Solutions

MTE's innovations in solving power quality provide platforms for customized solutions that can be tailored to your applications and needs. Contact MTE for more details.

PM



TEAL® Power Conditioning and Distribution Units

TEAL's Power Conditioning and Distribution Units (PCDUs) are recognized to improve power quality worldwide. Tailored to specific applications, no two solutions are exactly the same. As a result, we have emerged as a leader in power quality subsystem design with a growing toolbox of practical patents and proprietary methods that translates into a competitive advantage for you.

A close-up photograph of a yellow industrial robotic arm with multiple joints and black cables, positioned in a factory setting. The arm is the central focus, with its segments extending from the left towards the right. In the background, other industrial equipment and a car chassis are visible, though slightly out of focus.

Take advantage of our expertise.

The knowledge and experience we bring to every project takes the mystery out of power quality problems and delivers solutions that are tailored to your specific needs. Power quality issues may be complex, but the solution is easy – MTE.

mtecorp.com



The power quality experts.

MTE Corporation was formed in 1982 by bringing together Milwaukee Transformer Co., Transformer Design Inc., and Milwaukee Electronics Corp. – companies that specialized in different fields of magnetics and transformer designs and were long established in their respective fields. MTE vaulted into a leadership role in power quality with its unique AC reactor design and passive filter expertise. We continued to grow as a global leader with innovative Harmonic Filters, Motor Protection Filters and Sinewave Filters.

Now with the addition of TEAL Electronics in 2016, MTE brings a continuum of power quality solutions unmatched in the industry. Building on TEAL's reputation of high-efficiency transformers and durable power conditioning and distribution units for demanding applications, MTE is building the best power quality company by capitalizing on the individual strength of each while bringing a new dimension in management, marketing, and quality.

Our team of professional design engineers has well over 100 years of collective experience in the industry and is complemented by as much experience in operations. Our engineers utilize state-of-the-art platforms and best-in-class simulation/modeling tools so that new designs meet your needs and the latest compliance standards while improving your bottom line.

At MTE, we know power quality because power quality is all we do.

A Handy & Harman company. Better together.

Handy & Harman Ltd. (NASDAQ:HNH) is a diversified manufacturer of engineered niche industrial products with leading market positions in many of the markets it serves. Through its wholly-owned operating subsidiaries, HNH focuses on high margin products and innovative technology and serves customers across a wide range of end markets. HNH's diverse product offerings are marketed throughout the United States and internationally.



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